

THE MAIN OBSTACLES AND COUNTERMEASURES OF IMPLEMENTING TOTAL QUALITY MANAGEMENT IN EGYPT: A CASE STUDY

Beenish Ghafar
Alexandria University, Egypt
Email: beenish897@yahoo.com

ABSTRACT

Total quality management (TQM) has effectively enhanced product quality in the manufacturing business, but services are always experiencing a low quality and hard to guarantee the product. The use of TQM in the service business issue has been studied. This research explores the key challenges and implementation strategy for the whole quality management of the Egypt's economic condition as a research subject. This paper based on qualitative method and uses several factors to describe, such as, the mission and vision, sustainable development and improvement, effective leadership, and information systems etc. The results revealed that there are multiple obstacles, procedure; mechanism must be resolved on the Egypt's management universities. Central decision-making, no innovation and routine and administrative complexities that weaken work and performance. The TQM application needs an extraordinarily adequate budget, the administrators, workers, do not use acceptable development and improvement methods, adopting an information system on traditional methods. Overall analysis suggests that the use of TQM characteristics in higher education in Egypt still presents obvious weaknesses. However, the average value of these six factors is less than 70 percent.

KEYWORDS *total quality management; manufacturing business; service business; implementation plan; higher education*



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International

INTRODUCTION

Total Quality Management (TQM) has viewed that human resource development to be critical. However, some writers have demonstrated the value of TQM in their works; for example, numerous concerns have contributed to increased

Ghafar, B. (2023). The Main Obstacles and Countermeasures of Implementing Total Quality Management in Egypt: A Case Study. *Journal Eduvest*. 3 (6): 1076-476
How to cite:
E-ISSN: 2775-3727
Published by: <https://greenpublisher.id/>

public awareness about the importance of higher educational institution quality in recent years (Dodin, 2010). As a result, quality measurement techniques and equipment such as auditing quality, programmers, and institutional assessment, accreditation, and performance indicators have garnered more attention. Many efforts were made to introduce models from the private educational sector into higher education and the education sector (Lucander & Christersson, 2020). Many viewpoints in higher education literature are skeptical about using most current management theories in the educational process, as most of them are already created for the industrial field and are unrelated to higher education philosophy (Mutonyi, 2021).

On the other hand, other studies believe that these theories might be accepted in the educational process. Some of these management theories and ideas can be used as tools and instruments to suit goals, strategies, academic missions and the management board (Van Looy, 2020).

TQM defines quality as; the beneficiary selects what quality is required, which satisfies the needs of the individuals. The task and complexity here are to satisfy all of the beneficiaries, each with various desires, personalities, and categories (Van Looy, 2020). Several colleges in the Asian world have begun to accept the need to include Total Quality Management concepts into their programs, policies, and educational objectives (Mahadevan, 2022).

Egypt has approximately 50% private universities and 50% governmental universities. Its universities have encountered numerous issues when implementing Total Quality Management. These include low customer satisfaction, low enrolment, and low employee motivation. The notion of quality in education is linked to all aspects of the educational system, demonstrating excellence and attainment of the desired goals (Khan, Malik, & Janjua, 2019).

As a result, this study aims to contribute to this site more broadly by analyzing TQM participation in the higher education sector whether TQM may be involved with Egypt's management universities a well-known private university in the country.

Egypt's Higher Education and Managements Universities

In Egypt, university education began at a young age. It all began with the creation of University of Management and Technology (UMT). There are currently fourteen state universities and fifty private universities, like, sixty-four universities since 1970. The number of graduates from public institutions in 2016/2017 was 4 543,000 students. In terms of specialization, 58.4 percent of all graduates were humanities graduates, 43.6 percent of whom were female, while 41.6 percent were applied disciplines graduates, and 31.8 percent of who were female (Jabbar, Hashmi, & Ashraf, 2019).

Analyzing university education data for the 2016/2017 school year reveals that university education is the first polarizer of secondary education output, with minimal alternatives available from colleges and vocational and technical institutes. University graduates are the end product of the university education process and make a substantial and critical contribution to the development process (Adnan, 2019).

The private sector has primarily had a role in basic and secondary education. Since the mid-1990s, the government has quickly contributed to university education by creating a suitable climate for the private sector. There are 50% private institutions and 50% public universities to accommodate a small fraction of many secondary school outputs, decreasing the increasing demand on public universities and their absorptive ability (Nawaz, Waqar, Shah, Sajid, & Khalid, 2019).

The obstacles to applying TQM in Egypt Universities

One of the most significant challenges confronting higher education institutions in Egypt is the low quality of programs and curricula. Because of institutions of higher education's lack of commitment to following academic accrediting criteria, ensuring the quality of their programs and curricula, and failing to keep up with societal demands.

The current administrative systems of universities are characterized by many shortcomings and weaknesses with administrative bureaucracy and weak adherence to laws, regulations, systems, traditions, and academic quality (Soomro & Shah, 2022).

Both at the University and pre-university levels, Egypt's education sector continues to suffer from numerous flaws (Saqib et al., 2020).

Egypt universities and colleges suffer from the same level of deterioration and reduction in educational levels since Egypt's general education standards do not conform to international standards and general educational policy orientations. Egypt ranks last in the world's top-class western international universities, which may be one of the causes for Egypt's institutions' low educational level.

Strategic visions

Universities are founded on a political or sociological goal rather than a clear scientific vision and objective. It also lacks proper planning and a specific and unambiguous educational strategy, despite an increase in the number of universities and governmental and private institutions and a lack of quality, and educational outputs that satisfy the market's wants and needs (Saleem, Muhammad, & Masood, 2020).

Educational elements

One of the reasons for implementing curriculum in Egypt's public and private institutions is the conventional, old-fashioned style of indoctrination and the quantitative preservation of general information that is beneficial in practice but is out of step with current developments (Torlak & Kuzey, 2019).

The rest of the paper is organized in the following manner. Section 2, describes the laboratories for scientific research, higher education performance levels in Egypt and TQM, factors towards implementation of total quality management in this study. The methodologies are discussed in Section 3. Results and discussion are presented in Section 4. Section 5 summarizes the findings of this study.

Laboratories for Scientific Research

Egypt universities suffer from a shortage of laboratories or the closure or non-availability of a sufficient number of laboratories; laboratories suffer from a lack of equipment, instruments, and materials utilized in them and a lack of the latest equipment and innovative devices and procedures. The majority of these

laboratories are gifts from the corporate sector or corresponding or scientific associate research from other countries (Xu, 2020). As a result, scientific research in Egypt is almost completely paralyzed at all educational institutions, research centers, and, most significantly, Egypt universities. The Ministry of Higher Education lacks a strategic vision to give scientific research the value it deserves.

Factors towards Implementation of Total Quality Management

TQM is concerned with a philosophy that is centered on a long-term strategy for attaining its goals. Its outcomes are not measured in a short period of time. It is regarded as one of the most serious flaws in the Adoption of TQM (Iqbal, Ashiq, Rehman, Rashid, & Tayyab, 2022). The evaluation of the results is not dependent on a short time frame. Other forces and variables impact the quality of educational outputs on the assumption that educational outputs are a competitive commodity that is constantly evaluated (Guoyan, Khaskheli, Raza, Khan, & Hakim, 2021).

Economic Factor

Egypt's economy is facing multiple setbacks and tragedies, which include lower salaries and an increase in unemployment owing to politics and conflicts that have hindered the economy every day. The related idiom is "Economic issues influence education in two ways: the commercial construction of society and the state's economic ideology (Khan, Saqib, & Hafidi, 2021).

The capitalist system is founded on economic transactions conducted without the government's direct participation, both at home and abroad (Fija, 2018). As a result, economic theory has reflected on the management of school education and university education favorably or negatively depending on the administrative structure utilized and the institution's size. Education funding is available.

Political consideration

The political component is related to the country's governing system and the current situations associated with that political system. This ideology is found in educational systems, where educational monitoring is used to achieve unity and make the state a partner in the education process (Petrocik, 2019). Egypt society suffers from the absence of obvious political stability due to events in the its situation and the authority's failure to fully regulate the processes of teaching and learning as a result of the conflicts that have destroyed the Egypt people's relationships (Ullah, Shah, Khan, Ahmad, & Scholz, 2021).

Factor of Civilization

Civilization growth in any society is founded on three main pillars: social forces, and institutions that absorb social forces, the educational system, its politics, and its philosophy (Stewart, 2020). The globe is currently undergoing various changes, including the information revolution and the rise and dissemination of real and administrative technology to society (McKee, van Schalkwyk, & Stuckler, 2019). Therefore, integrity, and its ability to protect relevant various systems, including the educational dependency of developed countries (Nanda, Xu, & Zhang, 2021).

The social aspect

While the social situation under the Islamic system conceals many bad aspects, it demonstrates social and familial solidarity, brotherhood, fairness, equality, and respect for the worth of individual individuality. The absence of personal interest, as well as an increase in belonging and other traits that are expressed in the educational field, both of which have the effect of preserving the individual's dignity, are not impacted by any new system. Despite these powerful forces in education, there are trends for future and potential, influential forces that will be reflected in education as a result of the recent rapid changes in the globe (Alariqi, 2022).

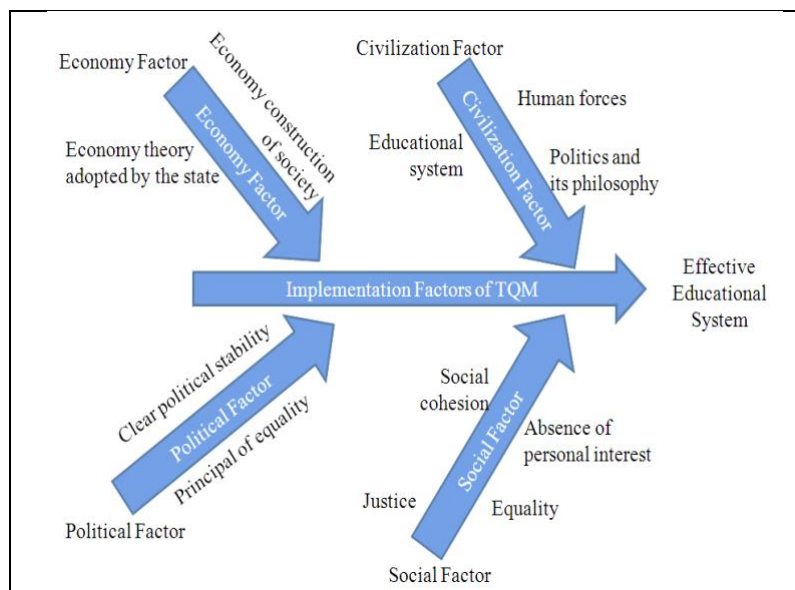


Figure 1. Factors influences applied TQM (By authors)

These characteristics as well as other trends such as globalization, it will impose additional burdens on the management of the school and university educational institutions. They do not become an impediment to future educational growth and development (Anwar & Abdullah, 2021).

The most major hurdles are university courses and programs that do not prepare students to compete in the labor market and contribute to society's growth. Furthermore, the university requirements have not been developed, given the homeland's internal and external issues. Finally, a significant barrier is a deficiency in general infrastructure, particularly in electronic infrastructure, limiting access to global information resources via the Internet (Lauder & Mayhew, 2020). Moreover, this study aims to contribute to this site more broadly by analyzing TQM participation in the higher education sector whether TQM may be involved with Egypt's management universities a well-known private university in the country.

RESEARCH METHOD

The study methods were concerned with data collection practices that can involve self-finished surveys or organized interviews. The study was nevertheless based on qualitative research. Therefore, it was conducted using self-finishing surveys and organized interviews, such as those by the researchers.

Sample

The researchers carried out a study into the ten basic theoretical constructs. The study used a sample of (250) (52) surveys in the Egypt's Management Universities, which provided a basis for basic theoretical constructions.

Sampling Procedure

Most independent variables of the current study were estimated through respondents' perceptual evaluation on a five-point Likert-type scale, but in the opposite direction by 1 (Strongly disagree) and 5 (Strongly agree), while the dependent variable was estimated using three-point Likert – type, namely 2 (disagree) and 3 (agree) (agree) (Sahney, 2016).

Research Procedure

This study was the first of its kind to use both primary and secondary data sources. There were a total of 221 questionnaires returned and used in this study. It took exactly one month for the surveys to be distributed and collected.

Designating the Survey Questionnaire

A questionnaire is a series of structured questions to collect data from respondents. The questionnaire was developed following the literature review. It consists of 10 sections, which are shown in Appendix A.

Evaluation of the validity of the survey

The validity of the research instrument was examined by consulting two experts. Experts were asked to show their thoughts on the level of visibility of the questionnaire components and how far these components were appropriate to evaluate the features.

Data Analysis

This study employed descriptive statistical analysis to analyze the acquired data. This analysis was carried out using SPSS version 24 to understand the demographic attributes of the responder utilizing the answer methods, frequencies and standard deviations, which are the mean for the percentage of analysis.

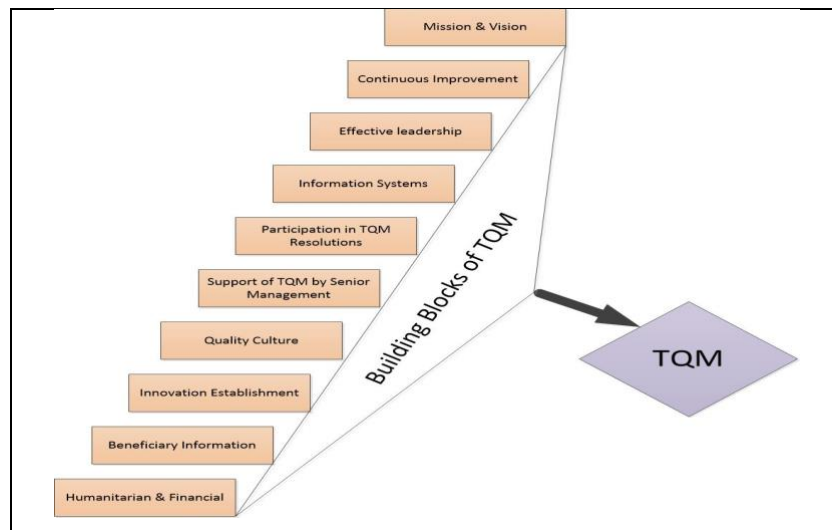


Figure 2. Conceptual frame work

RESULT AND DISCUSSION

There are ten dimensions used in analyzing the lowest degree of obstacles to implement TQM. These standards are Mission & Vision of the University (MVU), Continuous Development & Improvement (CDI), Effective Leadership (EL), Information System (IS), Participation resolution (PR), Support management Leadership (SML), Quality Culture (QC), Innovation & Establishment (INE), Beneficiary information Deficiency (BD), and Humanitarian & Financial Capabilities (HFC).

Furthermore, there are six quantitative measures used in analyzing data in all standards. The six quantitative measures are Mean, Standard Deviation (SD), T-test (T), P-test, percentage (%), and Label. It is represented in Table (1).

Table 1. Major Dimensions

dimension	Mean	SD	T	P	%	label
MVU	3.72670	.789858	13.677	.000	75%	10
CDI	3.64027	.825452	11.531	.000	73%	9
EL	3.49709	.930675	7.940	.000	70%	8
IS	3.49620	.898508	8.210	.000	70%	7
PR	3.09785	1.103635	1.318	.189	62%	1
SML	3.32692	.848307	5.729	.000	67%	5
QC	3.33529	.932932	5.343	.000	67%	6
INE	3.28145	1.062189	3.939	.000	66%	3
BD	3.29050	.869561	4.966	.000	66%	4
HFC	3.26787	.884158	4.504	.000	65%	2

Source: Output from SPSS 24

In the analysis, the 100% result is achieved if the mean value reached 5. The mean value of MVU in comparing other dimensions is better with 3.72670, and the value of standard deviation (SD) is less, which shows that the data is close to

the mean. The p-test value is set for 0.05 or 5% to identify the result. The p-value of less than 0.05 shows that the result is statistically significant and therefore acceptable.

In the MVU dimension, the p-value is 0.000 which is highly acceptable. Likewise, CDI and EL are acceptable and statistically significant in their measure of obstacles to implement TQM. However, the result is worst in PR where the p-value is 0.189 which is higher than 0.05, representing 18.9 percent.

The percentage based on mean value is down and even (SD) value is high. Although it is not statistically significant in our case, it has theoretical underpinnings with TQM. In terms of percentages, values greater than or equal to 70 means agreement and values less than 70 means disagreement with dimension.

This study represented two variables, Total Quality Management (TQM) and Educational Development (EIU). Based on the research results, the sample profile statistics show that 19 percent of the employees were male and 81 percent were female. In terms of age, 34 percent of the employees were under age 30 years, 40 percent were in between age 30 and 40 years, 25 percent were in between age 40 and 50 years, while 1 percent is higher than 50 years.

In terms education/position, 11 percent of the employees are administrative staff, 36 percent employees are teaching assistants. Whereas 13 percent of employees are teachers, 25 percent were assistant professors, 6 percent were top associate professors, and 9 percent were full professors. In terms of work experience, about 46 percent of the employees have been employed for less than five years, 30 percent for 5 to 10 years, 10 percent for 11 to 15 years, 7 percent for 16 to 20 years, and 3.6 percent for 20 to 25 years and 3 percent over 25 years.

These dimensions are MVU, CDI, EL, IS, QC, SML, BD, INE, HFC, and PR. It is assumed that the results with the construct that is less than 70% are not good or obstacles that need improvement. From the analysis, the best result found in the dimension was MVU. Moreover, CDI, EL, and IS are also acceptable because they were above 70 percent threshold and statistically significant at that level. These dimensions, such as QC, SML, BD, and HFC need an improvement, whereas PR is not right in all, but it needs more attention than the others.

CONCLUSION

The study has attempted to identify the main obstacles affecting the apply Total Quality Management in Egypt's management universities as a dependent variable, ten independent variables have been considered. Study data was collected from 250 respondents those are an academic and administrative specialist in Egypt's management universities, with (52) survey items.

The results revealed that there are multiple obstacles, procedure; mechanism must be resolved on the Egypt's management universities. Central decision-making, no innovation and routine and administrative complexities that weaken work and performance. The TQM application needs an extraordinarily adequate budget, the administrators, workers, do not use acceptable development and improvement methods, adopting an information system on traditional methods. There is a weakness of trained and qualified cadres in total quality management in higher education, assuming responsibility and innovation. Weaknesses on quality

management and the relationship between the university and the local community. The feebleness of the processes involved in decision-making. Also, the faintness of the leadership styles of the decision-making managers, administrators at the University. Finally, Cultural and social heritage refuses to accept what is new and evolving.

REFERENCES

- Adnan, A. (2019). *The After-school extracurricular needs of Swat's college girls*. University of Oregon.
- Alariqi, M. (2022). The Main Obstacles And Countermeasures Of Implementing Total Quality Management In Eiu: Case Study From Yemen. *Journal of Positive School Psychology*, 6(8), 9340-9349.
- Anwar, G., & Abdullah, N. N. (2021). The impact of Human resource management practice on Organizational performance. *International journal of Engineering, Business and Management (IJEEM)*, 5.
- Guoyan, S., Khaskheli, A., Raza, S. A., Khan, K. A., & Hakim, F. (2021). Teachers' self-efficacy, mental well-being and continuance commitment of using learning management system during COVID-19 pandemic: a comparative study of Pakistan and Malaysia. *Interactive Learning Environments*, 1-23.
- Iqbal, S. A., Ashiq, M., Rehman, S. U., Rashid, S., & Tayyab, N. (2022). Students' perceptions and experiences of online education in Pakistani Universities and Higher Education Institutes during COVID-19. *Education Sciences*, 12(3), 166.
- Jabbar, M. N., Hashmi, M. A., & Ashraf, M. (2019). Comparison between Public and Private Secondary Schools Regarding Service Quality Management and Its Effect on Students' Satisfaction in Pakistan. *Bulletin of Education and Research*, 41(2), 27-40.
- Khan, I., Saqib, M., & Hafidi, H. (2021). Poverty and environmental nexus in rural Pakistan: a multidimensional approach. *GeoJournal*, 86, 663-677.
- Khan, M. N., Malik, S. A., & Janjua, S. Y. (2019). Total Quality Management practices and work-related outcomes: A case study of higher education institutions in Pakistan. *International Journal of Quality & Reliability Management*.
- Lauder, H., & Mayhew, K. (2020). Higher education and the labour market: an introduction (Vol. 46, pp. 1-9): Taylor & Francis.
- Lucander, H., & Christersson, C. (2020). Engagement for quality development in higher education: a process for quality assurance of assessment. *Quality in Higher Education*, 26(2), 135-155.
- Mahadevan, B. (2022). *Total Quality Management in the Healthcare industry: An Efficient Guide for Healthcare Management*: Notion Press.
- McKee, M., Van Schalkwyk, M. C., & Stuckler, D. (2019). The second information revolution: digitalization brings opportunities and concerns for public health. *European journal of public health*, 29(Supplement_3), 3-6.

- Mutonyi, B. R. (2021). Employees' psychological capital and innovative behavior in higher education. *International Journal of Quality and Service Sciences*, 13(2), 198-215.
- Nanda, A., Xu, Y., & Zhang, F. (2021). How would the COVID-19 pandemic reshape retail real estate and high streets through acceleration of E-commerce and digitalization? *Journal of Urban Management*, 10(2), 110-124.
- Nawaz, A., Waqar, A., Shah, S. A. R., Sajid, M., & Khalid, M. I. (2019). An innovative framework for risk management in construction projects in developing countries: evidence from Pakistan. *Risks*, 7(1), 24.
- Petrocik, J. R. (2019). Divided Government: Is it all in the Campaigns? *The politics of divided government* (pp. 13-38): Routledge.
- Saleem, A., Muhammad, Y., & Masood, S. (2020). Classroom management challenges and administrative support in elementary schools: Experiences of novice public-school teachers. *UMT Education Review*, 3(2), 29-46.
- Saqib, Z. A., Zhang, Q., Ou, J., Saqib, K. A., Majeed, S., & Razzaq, A. (2020). Education for sustainable development in Pakistani higher education institutions: An exploratory study of students' and teachers' perceptions. *International Journal of Sustainability in Higher Education*, 21(6), 1249-1267.
- Soomro, B. A., & Shah, N. (2022). Entrepreneurship education, entrepreneurial self-efficacy, need for achievement and entrepreneurial intention among commerce students in Pakistan. *Education+ Training*, 64(1), 107-125.
- Stewart, B. (2020). The rise of far-right civilizationism. *Critical Sociology*, 46(7-8), 1207-1220.
- Torlak, N. G., & Kuzey, C. (2019). Leadership, job satisfaction and performance links in private education institutes of Pakistan. *International Journal of Productivity and Performance Management*.
- Ullah, Z., Shah, N. A., Khan, S. S., Ahmad, N., & Scholz, M. (2021). Mapping institutional interventions to mitigate suicides: A study of causes and prevention. *International journal of environmental research and public health*, 18(20), 10880.
- Van Looy, A. (2020). Capabilities for managing business processes: a measurement instrument. *Business Process Management Journal*, 26(1), 287-311.