

The role of continuous improvement in developing the quality service of local food company customers

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ABSTRACT

Continuous improvement is essential for enhancing service quality because it promotes early problem identification, aids in process development, focuses on the customer, involves staff, creates performance measurement systems, and promotes a culture of learning and adaptation. This is what the study found. Organizations can consistently improve the quality of their services, satisfy customer expectations, and attain long-term business success by using continuous improvement techniques. All prior research has focused on a single area of continuous improvement, which, for some reason, is either employee skills development, customer orientation, or the promotion of a learning culture. This is the main distinction between this study and prior studies. But in this study, we concentrated on measuring all roles and making recommendations for improvements at the same time in order to optimize the organization's performance and productivity. According to research, the rate of continuous improvement may increase to as much as 80% in certain situations, with the rate increasing along with the overall performance and quality of the organization..

Keywords: : customer, organization performance, total quality management

1. INTRODUCTION:

To improve the quality of service provided to mineral water consumers, continuous improvement is necessary. As mineral water firms are under greater pressure to satisfy consumer demands, maintain product safety, and offer outstanding service in today's cutthroat industry, they must deliver on these expectations. Continuous improvement provides organizations with a way to identify future growth opportunities early in the process; it also helps them improve their own internal processes and ultimately provide all customers with quality service that meets or exceeds client expectations every time....(Alkhafaji, 2019).

The mineral water industry is committed to delivering high-quality, safe and reliable bottled water that meets the highest standards of human health and safety. In order to accomplish this objective, businesses will create exciting new technologies and processes for the prevention of illness and make substantial investments in their continued enhancement. This approach not only allows for early detection of potential quality issues but also improves the industry's most important practices and broadens the overall satisfaction of consumers. Ongoing sustainability efforts include continual measurement to identify improvement areas, implement corrective actions and monitor results.

Minimizing waste, maximizing efficiency, and providing value to customers at the lowest cost are the objectives of a comprehensive list of principles and methodologies, including Total Quality Management (TQM), Lean Six Sigma, and Kaizen.

By applying principles of continuous improvements, mineral water handling companies can gain numerous advantages. These businesses will improve the safety of their manufactured goods as well as the safety and purity of those products by implementing a greater amount of Quality Control throughout every phase of the product's creation, as well as, through the entire process of shipping and delivery from the manufacturer to the retailer and ultimately to the customer, thus ensuring that all mineral water purchased by a consumer meets the greatest possible standards of cleanliness and safety... (Alkhafaji & Herrera, 2021).

By improving the overall systems of operation with continuous development, businesses will see an increase in efficiency and ultimately an overall decrease in cost. Continuous development enables businesses to understand what works best for them through the systematic analysis of their problems (and finding solutions) which will reduce waste, increase efficiency in production, and ultimately lead to a more profitable business. They will be able to provide a competitive price to their customers for the same quality of product as competitors.

Bottled Water Companies are always looking to evolve to better support the needs of consumers. This ongoing evolution of bottled water companies will lead to improved customer experience while also adding to the operational efficiency and quality of their products. Bottled Water Companies can provide customers with the types of bottled water that they desire by using continuous consumer feedback and ensuring that consumer satisfaction levels are being continually monitored. By addressing customer inquiries, providing customized

product service and utilizing multiple methods of communication with the customer, Bottled Water Companies can improve their overall Customer Service Experience.

It contributes to improving the quality of services provided to water employees as part of companies that wish to succeed in a competitive market. Embracing the philosophy of Continuous Improvement enables business organizations to create an innovative, flexible, and customer-centric culture that will not only help improve the level of quality provided but also enhance the organization's brand image, increase customer loyalty, and create opportunities for long-term business success.

This research aims to identify the various components of the continuous improvement process in the mineral water sector, specifically the types of continuous improvement strategies that are used and the best practices for implementing these strategies, as well as actual examples of successful implementations of continuous improvement in the mineral water sector. We will use our understanding of the significance of continuous improvement to provide the mineral water sector with valuable recommendations and ideas that will help ensure high-quality mineral water products and meet customers' evolving requirements.

Research Problem

Continuous improvement's role in enhancing the service quality of mineral water producers has created many research avenues and questions. The definition of your research subject could come from a list of continuous improvement methods below.

1. This research may explore a number of different methods, Continuous Improvement Strategies, and Frameworks available to the Mineral Water Industry. Additionally, the Mineral Water Industry can utilize lessons learned from other industries that have adopted best practices in the Mineral Water Industry, in order to better meet their customers' needs in 2023, and beyond. Our research will also show how these recent trends can be most effectively adapted to the Mineral Water Service Industry.

2. The present study investigates the quality management systems of mineral water producers and evaluates whether they are effectively ensuring product safety and consumer expectations. The project will provide a comprehensive review of the mineral water producers' quality control procedures and processes, as well as an evaluation of compliance with various industry regulations. Finally, the project aims to identify potential supplementary techniques based on continuous improvement methodologies to enhance the effectiveness of existing systems.

3. To accurately ascertain the customer's needs and wants regarding minerals in water, it is vital to comprehend this concept as a business. Our level of service is largely contingent upon our ability to provide an exceptional level of service so therefore, we can utilize the knowledge we have gained from understanding what customers value about their purchase—such as the quality of the Water, timely response, delivery and overall satisfaction with the

service offering. We can utilize a variety of means to gather responses, including surveys, then listen to customers' input and recommendations, and assess areas for improvement. Interdepartmental collaboration, involving support teams to identify and track customer's perceptions, can affect the overall customer experience. Ultimately our objective is to satisfy customers and fulfil their expectations.

4. The implementation of continuous improvement within the mineral water sector can be quite challenging. For example, it can be challenging to identify the root cause of the issues plaguing the business. Examples of the types of issues that may hinder progress include the lack of human or financial resources, the difficulty in coordinating activities across divisions, staff resistance to changing processes, and a general lack of knowledge about the long-term benefits of ongoing improvements to the business. Without recognizing and resolving these barriers, the entire process will not be able to achieve success.

5. Ongoing Improvement - Performance measurement and active monitoring of the different mechanisms and processes developed to help players and coaches understand the impact of their efforts on improving their levels of service quality. Are service levels improving, and are customers happier, etc. The research will develop a way to measure performance and an ongoing monitoring system that will allow for the identification of which factors are effective and may require an adjustment.

6. By examining the real life stories and examples of success in the mineral water industry, this research will provide insights into how certain mineral water companies have improved their service quality through an effective use of continuous improvement practices. By reviewing case studies, this research will give good examples of the types of strategies, techniques and approaches that were effective for these companies. The learning outcomes from this review will help create practical guidance and best practices that other mineral water brands can implement to increase their success. The research may serve to demonstrate the positive impact of implementing continuous improvement practices on the quality of services provided to customers who buy bottled or packaged goods. It is likely that this research will offer some means of helping companies that sell bottled or packaged mineral water understand how to use continuous improvement methods when designing and implementing service quality that meets the changing needs and expectations of their consumers.

Research questions

What is the level of application of continuous improvement in water manufacturing plants?

What is the level of development of the quality of services provided in water manufacturing plants?

What is the role of continuous improvement in developing the quality of services provided in water manufacturing plants?

Research objective

Identify the level of application of continuous improvement in water manufacturing plants

Identifying the level of development of the quality of services provided in water manufacturing plants

Recognizing the role of continuous improvement in developing the quality of services provided in water manufacturing plants

Research Importance

The role of continuous improvement in developing the quality of services provided to mineral water consumers is of significant importance for several reasons:

1. Promoting Continuous Improvement for Consumer Safety and Satisfaction: We will continue to work to keep mineral water as safe as we can and as good as possible for consumers. Companies must maintain effective quality systems, regularly evaluating and enhancing their manufacturing processes to reduce the risk of any contamination. By doing so, they provide assurance that the water they sell is pure and can be trusted. Additionally, through a focus on improved service levels and quality, companies will have increased happiness among their customers and increased levels of trust in their brands.

2. Mineral water manufacturers must also follow laws and regulations, ensuring the security and quality of their products. They must maintain the highest levels of quality control and conduct regular inspections to ensure they maintain their compliance with governmental regulations. The continuous improvement process is an effective way for businesses to ensure that they stay ahead of regulations and enhance their operations and processes to the next level through innovative thinking and new strategies.

3. Market differentiation & competitive edge: In a saturated marketplace, mineral water manufacturers have the potential to create distinction & uniqueness among competitors through the continual improvement & development of their products/services. Continually seeking to be better than the last time & beyond the competition enables a company to build a reputation for being top of its class.

4. Researching this topic is essential for every company in the industry to discover ongoing, new methods of improving your company's presence, thereby allowing a business to take advantage of new opportunities to differentiate itself & gain that edge over its competitors.

5. Cost Reduction and Increased Efficiency: Ongoing improvement efforts can provide mineral water manufacturers with a great deal of cost savings as well as streamlined business operations. By revising current methods of doing things, minimizing waste, and utilizing existing resources more efficiently, companies can achieve lower operating costs and a higher level of profitability without sacrificing the quality of their products. Future research may identify additional innovative practices and technologies that will further enhance the efficiency of the mineral water sector.

6. Through a commitment to improve their service continually, Mineral Water Companies elevate their image through perceived value and reliability, consequently leading to an increase in customer trust and

reputation. As a result of consistently providing continued quality improvements, customers notice and are more likely to use the brand again. The effects of ongoing improvement on customer perceptions and ongoing brand loyalty can serve as a good source of insight to further develop a Mineral Water Company's brand and retain customers.

7. The Continuous Initiatives to improve efficiencies by reducing the environmental impact of bottled water companies through sustainable practices will help mineral water manufacturers to increase their overall ecological footprint by implementing these three strategies; to use natural renewable resources in their bottling and packaging process, to minimize waste in their bottling and packaging process and to create new sustainable processes and services that limit their effluence of greenhouse gases into the atmosphere. Sustainable development is an ongoing process of improving and innovating new ways to reduce the negative impact that mineral water companies have on the environment, while allowing them to continue to grow and evolve as a company.

In general, research that explores how continuous improvement has impacted on the service quality offered by mineral waters will provide an important benefit to the mineral water industry. Research will be able to create new products and services that will enhance customer satisfaction and regulatory compliance for mineral water companies through improvement of their processes and systems that deliver a better, safer product. This process is called continuous quality improvement (CQI).

Literature Review

Continuous improvement is defined as an ongoing effort to improve the processes, systems and practices used by an organisation to achieve better results and a higher level of performance through a systematic process for identifying and implementing improvement opportunities and continually monitoring results to maintain the improved performance over time. (Berwick, 2019).

The quality of service is how well a business performs its duties and meets customer needs. This includes how well a company provides products, services and support, but also how well it provides these to its customers and their satisfaction. The quality of service includes things like what products and services look like, what they do, how they work, and how reliable they are. (Aras, et al 2023).

The connection is strongly held between continuous improvement and the quality of services. To improve the quality of the service offered to customers, you must engage in continuous improvement activities to affect the quality and value of the services included the quality of the service. (Twum, et al 2023), (Bintoro, et al 2023), (Arici, et al 2023), (Thakur, et al 2023):

(1) An Organization's ability to Improve consistency by Proactively Identifying Areas for improvement through Feedback from Customers: The continuous improvement philosophy enables an Organisation to Proactively Identify areas for improvement in the organisation's services. In order for an Organisation to Improve Service Quality, it must continually monitor customer feedback as

well as performance metrics using both regular evaluations and assessments. A Proactive approach to consistent improvement helps Organisations address issues before they have a chance to develop into major problems and therefore Improves Service Quality.

2. Process Optimization: Continuous improvement aims to increase the quality of service by increasing the quality of processes or reducing inefficiencies. Analysis of processes and their streamlining will enable companies to find and eliminate unnecessary and redundant steps in each process as well as providing a greater degree of overall efficiency and less opportunity for error. An optimised process facilitates seamless service delivery; reduces customer wait times, provides increased customer satisfaction, and will ultimately improve the quality of services provided.

3. Organisations value their customers and continually seek opportunities to improve their service quality. Through continued feedback from their customers, organisations gain valuable information to align their business processes with their customers' expectations. By focusing on what customers are looking for in terms of service, organisations will derive new ways to tailor their services to specific customer groups, increase their turnaround times, and develop personal service for their customers. With ongoing customer feedback, organisations will continue adapting and evolving the way they do business and the services they offer.

4. Engaging and empowering employees will allow organizations to continue to improve and create engaged employees who take ownership of their job and provide quality service to their customers by connecting their work to customer needs, providing their opinion about the evaluation process and providing their input to improve the evaluation process and improving the organization's ability to meet customer needs. When an organization creates an environment for employees to be engaged and empowered it will create engaged and empowered employees.

5. Measurement and Monitoring: For organizations to be successful in their quest for continuous improvement, they need to establish a system to measure their performance and monitor their progress. When an organization uses Key Performance Indicators (KPIs), they can see what works, what doesn't work, and how the KPIs are contributing to service quality. By regularly monitoring KPIs gives organizations the ability to make real time adjustments to maintain high levels of service quality.

6. Developing a culture of learning, adaptability and innovation through continuous improvement. An organisation with a culture of continuous improvement provides opportunities for staff (\$\$) to fail and learn, which leads to greater adaptability and better service. As a result, organisations with a culture of continuous improvement maintain a competitive advantage and consistently provide high-quality services.

Application framework

Study methodology:

The descriptive analytical method was used, because it achieves the purposes and objectives of the study

Study population and sample

The population is all the workers in the Water manufacturing plant, and through the simple random sampling method, the sample number reached 55 individuals working in milk production.

Study tool

The questionnaire consisted of the characteristics of the sample and the statements of the study's axes (the continuous improvement axis and the developing the quality of services axis). It included 10 statements and used a five-point Likert scale.

Validate the study tool

Table (1) Correlation phrase questionnaire

Phras es	Correlat ion coefficient	P- val ue	Phras es	Correlat ion coefficient	P- val ue
continuous improvement			developing the quality of services		
1	**0.933	0.000	1	**0.821	0.000
2	**0.955	0.000	2	**0.918	0.000
3	**0.875	0.000	3	**0.911	0.000
4	**0.860	0.000	4	**0.587	0.000
5	**0.877	0.000	5	**0.829	0.000

It turns out that all correlation coefficients are statistically significant, which indicates the high level of validity of the study tool

Reliability study tool

Table (2) Reliability questionnaire

	Alpha Cronbach	number of elements
continuous improvement	0.939	5
developing the quality of services	0.874	5
Total questionnaire	0.951	10

It is evident that the Reliability of the study axes is high, as the Cronbach value was greater than 0.07

Demographic characteristics

Table (3) sample according to Demographic characteristics

	Categories	N	%
Gender	Male	34	61.8
	female	21	38.2
Age	Less than 30 years	22	40.0
	From 30 to less than 40 years	17	30.9
	From 40 and over	16	29.1
work experience	Less than 5 years	14	25.5
	From 5 to less than 10 years	16	29.1
	From 10 to less than 15 years	15	27.3
	15 years and over	10	18.2

The variables of study

The continuous improvement axes:

Table (4) Phrases of the continuous improvement

N.	Phrase	Mean	S. D	Degree	Arrangement
1	Continuous improvement and development is considered an integral part of quality requirements	3.636	1.161	High	1
2	The services that are provided are carefully prepared to ensure that they meet the future needs and expectations of individuals	3.364	1.161	Medium	4
3	Communication takes place between various departments when developing and improving a provided service or a new service	3.364	0.988	Medium	3
4	The administration provides a quality guide that includes all the details of the improvement and development	3.545	0.789	High	2

	projects to be implemented				
5	Workers participate in preparing and developing quality improvement and control plans	3.182	0.945	Medium	5

The 2-expression in continuous improvement axes were the high, 3-expression in continuous improvement axes were the medium and it shows the high level of the continuous improvement where mean is **3.418** and S.D **1.009**

The developing the quality of services axes:

Table (5) Phrases of the developing the quality

N.	Phrase	Mean	S. D	Degree	Arrangement
1	The services required are rapidly evolving	3.000	0.962	Medium	5
2	We work to provide all the services that customers need	3.364	1.078	Medium	3
3	The level of service provision is being developed to increase the ease of customers obtaining services	3.455	0.997	High	2
4	There is an interest in increasing the efficiency of the services that customers receive	3.091	0.908	Medium	4
5	There is an interest in increasing and diversifying the ability to provide the best services	3.818	1.203	High	1

The 2-expression in developing the quality axes were the high and 3-expression in developing the quality axes were the Medium and it shows the medium level of the developing the quality where mean is 3.345 and S.D 1.030

The impact of continuous improvement on developing the quality

Table (6) impact of the continuous improvement on developing the quality

B	T	F	R	P-VALUE
0.833	15.100	228.003	0.901	0.000

It was found that there was a statistically significant effect of continuous improvement on developing the quality at 0.05, and the effect was positive. It was found that whenever the level of continuous improvement increased

by 1%, the ability to developing the quality increased **0.833 %**

2. CONCLUSION

The high level of the continuous improvement in the dairy industry company where mean is **3.418** and S.D **1.009**

The Medium level of the developing the quality in the dairy industry company where mean is 3.345 and S.D 1.030

There was a statistically significant positive effect of continuous improvement on developing the quality at 0.05, and the effect was positive. It was found that whenever the level of continuous improvement increased by 1%, the ability to developing the quality increased 0.833 %

Recommendations and Future Research

Attention must be paid to providing the capabilities and needs that contribute to increasing companies' ability to

implement continuous improvement efficiently and effectively.

Working to provide an appropriate work environment that contributes to developing the quality of services provided by companies

Encouraging researchers to conduct more studies related to continuous improvement and its impact on productivity and quality of services provided

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