

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE**  
**UKRAINIAN-AMERICAN CONCORDIA UNIVERSITY**

Faculty of Management and Business

Department of International Economic Relations, Business & Management

**Bachelor's Qualification Work**

Continuous Improvement in Quality Management

(based on BMN ltd. case)

Bachelor student of the 4<sup>th</sup> year of  
study

**Andrii Bozhko**

Field of Study 07 – Management  
and Administration

Specialty 073 – Management

Educ. program – IT Management

Research supervisor

**Tetiana Gordiienko**

Ph.D. in Economics

Kyiv – 2024

## **Abstract**

The study delves into the realm of continuous improvement in quality management, centered around the case of BMN Ltd. It demonstrates how the digitalization of processes within the quality management framework has yielded notable benefits. This transformation has facilitated the swift exchange of information, enhanced the efficacy of personnel management, and opened up a plethora of employment opportunities while streamlining business operations for clientele.

Concurrently, the study addresses the potential pitfalls of digitalization. These include concerns such as the risk of relinquishing control to artificial intelligence and the dissemination of false quality-related information via various media channels, and it explores how BMN Ltd. navigates these challenges through adept management strategies.

In conducting this research, insights from BMN Ltd., particularly their utilization of information systems, online sales management, and customer engagement via social media platforms, were examined. The findings of this analysis affirm the overarching positive impact of digitalization on quality management systems. Additionally, actionable recommendations are provided to further optimize the integration of modern information technologies for enhanced quality management practices.

**Keywords:** continuous improvement, quality management, digitalization, information technologies, BMN Ltd.

## **Анотація**

Дослідження заглиблюється в сферу безперервного вдосконалення управління якістю, зосереджене навколо випадку BMN Ltd. Воно демонструє, як цифровізація процесів у рамках системи управління якістю принесла значні переваги. Ця трансформація сприяла швидкому обміну інформацією, підвищила ефективність управління персоналом і відкрила безліч можливостей працевлаштування, одночасно оптимізувавши бізнес-операції для клієнтів.

Одночасно дослідження розглядає потенційні підводні камені цифровізації. До них належать такі проблеми, як ризик передачі контролю штучному інтелекту та розповсюдження неправдивої інформації, пов'язаної з якістю, через різні медіа-канали, а також досліджується, як BMN Ltd. керує цими проблемами за допомогою вмілих стратегій управління.

Під час проведення цього дослідження було вивчено знання BMN Ltd., зокрема використання ними інформаційних систем, управління онлайн-продажами та залучення клієнтів через платформи соціальних мереж. Результати цього аналізу підтверджують загальний позитивний вплив цифровізації на системи управління якістю. Крім того, надано дієві рекомендації щодо подальшої оптимізації інтеграції сучасних інформаційних технологій для вдосконалення практик управління якістю.

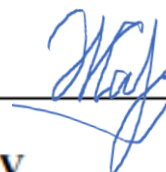
**Ключові слова:** постійне вдосконалення, управління якістю, цифровізація, інформаційні технології, BMN Ltd.

**Faculty of Management and Business**  
**Department of International Economic Relations, Business and Management**

Educational level: **Bachelor degree**  
Specialty **073 “Management”**  
Educational program **“IT Management”**

**APPROVED**

Head of Department



**Prof. Zharova L.V.**

“ ” 20

**TASK**  
**FOR BACHELOR’S QUALIFICATION WORK OF STUDENT**

**Andrii Bozhko**

(Name, Surname)

1. Topic of the bachelor’s qualification work

**Continuous Improvement in Quality Management (based on BMN ltd. case)**

Supervisor of the bachelor’s qualification work **Gordiienko Tetiana, PhD in Economics,**

(surname, name, degree, academic rank)

Which approved by Order of University from ***“25” September 2023 № 25-09/2023-2к***

2. Deadline for bachelor’s qualification work submission ***“25” April 2024.***

3. Data-out to the bachelor’s qualification work **The bachelor’s qualification work aims to comprehensively explore the principles and methodologies of continuous improvement in quality management, using the BMN Ltd. case study as a primary framework for thorough practical analysis and development of the recommendation.**

4. Contents of the explanatory note (list of issues to be developed) **Synthesize knowledge on improvement strategies such as Six Sigma, Lean, Total Quality Management (TQM), and other relevant methods. Provide real-life instances and case studies demonstrating the implementation of continuous improvement strategies. Analyze the impact of continuous improvement on a company’s performance. Conduct a SWOT analysis of the structure and environment of BMN Ltd. Examine various approaches and tactics for enhancing quality management through improvement efforts. Address the challenges associated with integrating continuous improvement practices into quality management processes. Develop metrics to measure the success of implemented quality improvements. Explore effective ways**

to tailor improvement methodologies to overcome integration obstacles. Offer insights and recommendations for organizations seeking to initiate or enhance their improvement journey.

5. List of graphic material (with exact indication of any mandatory drawings)

Quality Management Principles, The Continual Process Improvement Model, The PDCA cycle, Relative Share of World Manufacturing Output 1750-1900, 10-year percent change in productivity by Mark Graban, Taylor's Scientific Management process, Taylor's Scientific Management process, History of total quality management by ASQ, SWOT analysis of BMN, Matrix organization structure, Working sheet, Manager report.

6. Date of issue of the assignment

### Time Schedule

№	The title of the parts of the qualification paper (work)	Deadlines	Notes
1.	I part of bachelor thesis	10.12.2023	In time
2.	II part of bachelor thesis	27.02.2024	In time
3.	Introduction, conclusions, summary	25.04.2024	In time
4.	Pre-defense of the thesis	29.04.2024	In time

Student  \_\_\_\_\_  
(signature)

Supervisor  \_\_\_\_\_  
(signature)

**Conclusions** (*general description of the work; participation in scientific conferences/ prepared scientific article; what grade does the student deserve*):

The bachelor's qualification work presents a good level of research and analysis. The content and structure of the paper generally meet methodological requirements, with some areas for improvement. The study primarily examines the quality management practices within the BMN Ltd., effectively showcasing the practical implementation of continuous improvement strategies in a specific company context. While the analysis provides valuable insights, there is room for deeper exploration and critical evaluation. The paper includes both empirical and theoretical recommendations; however, they could have been more elaborated. The author correctly aligns these recommendations with the main goal and tasks of the study, demonstrating a clear understanding of how continuous improvement contributes to organizational success. While there are areas that could be refined, the paper offers valuable insights and contributes to the understanding of quality management practices. In general, upon successful defense, the work can claim to be "good."

Supervisor  \_\_\_\_\_  
(signature)

## TABLBE OF CONTENT

INTRODUCTION.....	2
CHAPTER 1. CONCEPTS OF QUALITY MANAGEMENT AND CONTINUOUS IMPROVEMENT.....	5
1.1 Definition and Principles of Quality Management.....	5
1.2 Importance of Continuous Improvement in Quality Management.....	11
1.3 Historical Development of Continuous Improvement in Quality Management .....	16
CHAPTER 2. QUALITY MANAGEMENT AT BMN LTD .....	25
2.1 Analysis of the company’s environment, organizational structure and economic indicators.....	25
2.2 A Quality Management System .....	27
2.3 Analysis of Key Quality Metrics.....	30
CHAPTER 3. CONTINUOUS IMPROVEMENT INITIATIVES IN QUALITY MANAGEMENT AT BMN LTD.....	42
3.1 Initiatives and Strategies for Continuous Improvement in Quality Management.....	42
3.2 Challenges of Integration of Continuous Improvement Initiatives in Quality Management.....	47
3.3 Measurement of the Success of the Implemented Improvement in Quality Management .....	54
CONCLUSIONS.....	56
REFERENCES.....	59

## INTRODUCTION

The pursuit of excellence in business and industry is crucial for success and long-term viability in an ever-changing landscape. To meet the evolving demands of their markets, organizations that prioritize quality management understand the importance of adaptability, refinement, and innovation. The notion of continuous improvement is a fundamental principle, acknowledging that high standards are not achieved once and for all, but rather through an ongoing process.

Continuous improvement in quality management goes beyond being a mere methodology; it is a mindset ingrained in every aspect of an organization. It involves systematically identifying and eliminating inefficiencies, enhancing existing processes, and persistently striving for excellence. Regardless of whether it's in manufacturing, services, or any other industry, the commitment to continuous improvement is the foundation for organizations aiming not only to fulfill customer expectations but to consistently exceed them.

This approach is rooted in various philosophies and methodologies of quality management, such as Six Sigma, Lean, Total Quality Management (TQM), and others. These frameworks offer structured methodologies and tools that enable organizations to analyze, optimize, and innovate their processes, fostering a culture of continuous improvement that becomes an integral part of the organizational fabric.

As we delve into the realm of continuous improvement in quality management, we will explore the key principles, methodologies, and real-life applications that empower organizations to navigate the complexities of today's competitive environment. From improving the quality of products and services to maximizing operational efficiency, the journey of continuous improvement represents a commitment to excellence that knows no boundaries across industries.

Real-life applications of continuous improvement abound across industries. For example, in manufacturing, companies may use techniques such as Just-in-Time (JIT) production to minimize inventory and reduce waste. In healthcare, hospitals may implement Lean principles to optimize patient flow and improve the

quality of care. Even in service industries like hospitality or finance, organizations can apply continuous improvement methodologies to enhance customer experiences and operational efficiency.

The journey of continuous improvement is not a destination but a perpetual process of learning, adaptation, and evolution. By embracing a culture of continuous improvement, organizations can stay agile and resilient in the face of uncertainty, positioning themselves for sustained success in a rapidly changing world.

**The relevance** of the topic: continuous improvement in quality management holds great importance in today's business landscape. In the modern era of globalization and intense competition, organizations encounter increasing consumer demands, strict regulatory standards, and the challenge of keeping up with rapid technological progress. Given these circumstances, the concept of continuous improvement in quality management is highly significant and relevant for various reasons.

**Aim of the work:** to comprehensively examine, scrutinize, and clarify the principles and methods of ongoing enhancement in quality management.

In order to achieve this aim, the following **tasks** were set:

-Summarizing knowledge, on improvement strategies like Six Sigma, Lean, Total Quality Management (TQM) and other relevant methods.

-Illustrating real life instances and case studies to showcase how continuous improvement strategies are put into practice.

-Articulating the influence of continuous improvement on a company's performance.

-Scrutinizing the structure, LTD BMN environment. Performing a SWOT analysis.

-Examining approaches and tactics for enhancing quality management through improvement efforts.

-Addressing the hurdles associated with integrating continuous improvement practices into quality management processes.



-Establishing metrics to gauge the success of implemented quality improvements.

-Exploring ways to effectively tailor improvement methodologies to overcome these obstacles.

-Offering insights and recommendations for organizations looking to start or enhance their journey, towards improvement.

**The object of the work:** The focus of the project is, on the approach to recognizing, studying and executing plans to improve quality management.

**The subject of the work:** involves exploring the core principles, techniques and real world applications tackling obstacles and fostering enhancements, within BMN LTDs quality management system.

**The methodological basis** of job includes creating content, for journals, popular online magazines, blogs, as well as performing detailed analysis and calculations, on personal data.

Bachelor thesis consists of an introduction, 3 chapters, conclusion, list of references. Work is carried out on 65 sheets, containing 14 pictures. References include 63 literature sources.

## CHAPTER 1. CONCEPTS OF QUALITY MANAGEMENT AND CONTINUOUS IMPROVEMENT

### 1.1 Definition and Principles of Quality Management

Quality management is an all-encompassing method that centers on guaranteeing that products or services fulfill or surpass customer anticipations. It encompasses organized procedures, strategies, and benchmarks that are created to attain and uphold elevated levels of quality.

The principles of quality management are commonly detailed in different global standards, and the ISO 9000 series is widely acknowledged as one such standard. (Nahil, 2020)

I would like mention key elements and principles of quality management:



Pic. 1.1 Quality Management Principles (Inspectorio, Quality Management Principles, 2021)

Give importance to comprehending and fulfilling the needs and desires of customers in order to elevate their overall satisfaction. (Inspectorio, 7 Principles of Quality Management, 2021)

The principle of prioritizing customers lies at the heart of quality management, stressing the significance of comprehending and fulfilling their needs. Here are

several fundamental aspects and consequences of this principle:

**Understanding the Requirements of Customers.** Organizations should actively seek to grasp the expectations and demands of their customers. This entails gathering feedback, conducting surveys, and engaging in direct communication to gain insights into what customers' value in products or services.

**Meeting Customer Specifications.** The primary objective is to provide products or services that meet the specific requirements and standards set by customers. This encompasses elements such as product features, quality, reliability, and performance.

**Surpassing Customer Expectations.** While it is crucial to fulfill the minimum requirements, exceeding customer expectations often sets organizations apart in the market. By going the extra mile in delivering value and quality, organizations may cultivate stronger customer loyalty and a positive brand perception.

**Ensuring Customer Satisfaction.** The ultimate measure of success in customer focus is the satisfaction of customers. When customers are content, they are more likely to become repeat customers and advocates for the brand. High levels of customer satisfaction contribute to positive word-of-mouth, referrals, and long-term business success.

**Adapting to Changing Customer Needs.** Customer needs and preferences may evolve over time. A customer-oriented organization remains flexible and adaptable, constantly monitoring the market and adjusting its products, services, and processes to align with changing customer expectations.

**Effective Communication with Customers.** Open and efficient communication with customers is vital. This includes providing clear information about products or services, promptly addressing inquiries and concerns, and keeping customers updated about any relevant changes or improvements.

**Fostering a Customer-Centric Culture.** Establishing a customer-centric culture within the organization involves instilling a mindset where every employee understands their role in delivering customer value. This culture permeates all levels of the organization, from top management to frontline staff.

**Feedback and Continuous Improvement.** Encouraging and collecting customer feedback is crucial for continual improvement. Analyzing customer complaints, suggestions, and comments can provide valuable insights that drive enhancements in products, services, and processes.

**Market Research and Trend Analysis.** Staying well-informed about industry trends and market dynamics is an integral part of being customer-focused. By anticipating changes in customer preferences or emerging market trends, organizations can proactively adjust their strategies to remain relevant.

**Building Brand Loyalty and Customer Retention.** Customer focus plays a significant role in fostering brand loyalty and retaining customers over the long term. Satisfied customers are more inclined to remain loyal, reducing the necessity for constantly acquiring new customers. (Inspectorio, 7 Principles of Quality Management, 2021)

Establish and sustain a united and supportive atmosphere where every individual contributes towards the goals of the organization. (Inspectorio, 7 Principles of Quality Management, 2021)

Effective leadership in the field of quality management emphasizes the importance of leaders in fostering a positive and cohesive environment within an organization. Several key elements and implications of effective leadership in quality management can be highlighted:

Successful leaders establish a clear vision for the organization's future and set realistic goals. This clarity helps employees understand the organization's direction and allows them to align their efforts accordingly.

Leaders engage in strategic planning to identify opportunities, assess risks, and allocate resources efficiently. They develop plans that support the organization's mission and ensure that quality objectives are integrated seamlessly into overall business strategies.

Transparent and open communication is a defining characteristic of effective leadership. Leaders effectively communicate the organization's mission, values,

and goals to all levels of the workforce. They actively encourage feedback, ensuring that employees feel heard and understood.

Effective leaders empower their teams by providing the necessary resources, training, and support. They cultivate an inclusive culture where every individual feels valued and is encouraged to contribute their unique perspectives and talents. Leaders set the organizational tone through their behavior and actions. By exemplifying desired values and work ethic, they inspire employees to follow suit. Leading by example fosters trust and credibility among the workforce. (Dot, 2022)

Involve and empower personnel at all levels to actively contribute towards the triumph of the organization. (Inspectorio, 7 Principles of Quality Management, 2021)

Employee engagement plays a crucial role in quality management by emphasizing active participation and empowerment of staff at all levels within the organization. This involves the following important aspects:

Motivating employees to actively contribute to decision-making processes creates a sense of ownership and dedication towards achieving organizational goals.

Investing in the ongoing professional growth of employees not only enhances their skills but also shows a commitment to their individual success.

Acknowledging and appreciating employees' contributions fosters a positive work environment and inspires them to actively contribute to the organization's overall success.

Granting employees responsibilities and decision-making authority empowers them and instills a sense of pride and accountability, ultimately leading to higher levels of engagement.

Establishing open and transparent communication channels ensures that employees feel valued and their voices are heard. Regular feedback sessions and transparent communication contribute to a culture of engagement within the organization.

Place emphasis on the organized management and comprehension of interconnected procedures to attain consistent outcomes. (Inspectorio, 7 Principles of Quality Management, 2021)

A core tenet of quality management is the systematic approach, which emphasizes structured administration and comprehension of related processes to provide consistent results.

Establish standardized, well-defined procedures across the entire company. This guarantees a methodical approach to different activities, which helps to maintain consistency in the delivery of goods or services.

Place a strong emphasis on managing and comprehending the connections between the various organizational processes and procedures. This comprehensive viewpoint aids in dependency identification and workflow optimization.

Achieving and maintaining consistent results is the aim. This calls for a methodical and uniform approach to procedures, which lowers variances and improves the predictability of outcomes.

Keep an eye on and assess procedures often to make sure they continue to be efficient and in line with company goals. This proactive strategy supports continuous development and flexibility. (Support, 2023)

Encourage a culture of ongoing improvement in products, services, and processes. (Inspectorio, 7 Principles of Quality Management, 2021)

One of the main tenets of quality management, continuous enhancement, promotes a continuous improvement culture in goods, services, and procedures.

Actively include suggestions from customers in projects aimed at improvement. Enhancing products and services requires an understanding of client viewpoints.

Use benchmarking techniques to assess how well an organization performs and compares its operations to industry norms. Finding opportunities for development is much easier with the help of an outside viewpoint.

Use analytics and data to inform improvement initiatives. Enhancement

projects are made focused and successful by using quantifiable measures. (Liker, 2004)

Base decisions on dependable data and information in order to make well-informed choices. (Inspectorio, 7 Principles of Quality Management, 2021)

To gather necessary data from different sources accurately and thoroughly, it is important to establish reliable data collection systems.

For processing and analyzing the collected data, it is essential to employ analytical tools and methods. This stage aims at extracting insightful information that can be used to make informed decisions.

In order to enhance the objectivity and effectiveness of decision-making processes, it is crucial to base decisions on the evidence provided by the analyzed data.

To ensure the data remains current, it is recommended to implement continuous monitoring mechanisms. By regularly reassessing and adjusting strategies based on new information and changing circumstances, one can stay up-to-date and make informed decisions.

Effective data collection is a continuous and iterative process that demands real-time monitoring and adjustments to ensure high-quality and reliable results. It involves the art of gathering information for informed decision-making and insights, often incorporating continuous monitoring or surveillance functions. The right data collection system, whether continuous or discontinuous, provides essential information to determine the effectiveness of programming.

Continuous monitoring is a key aspect, ensuring the ongoing effectiveness of data collection methods. It involves tracking data sources and implementing mechanisms for accuracy and efficiency. To optimize strategies and support informed decision-making, it is crucial to monitor the effectiveness of data collection methods regularly. (Mason, 2015)

## **1.2 Importance of Continuous Improvement in Quality Management**

The concept of the continuous improvement model revolves around the notion that businesses should constantly strive to enhance their processes by focusing on the activities and practices that generate the greatest value for all stakeholders. This involves minimizing waste within the framework of the lean methodology. The practice of continuous improvement enables companies to identify and seize opportunities for enhancing their operations. It serves as a crucial foundation for methodologies like lean and agile, Six Sigma, Kaizen, and the Toyota Production System.

Various management systems, such as quality management, project management, program management, and other business process management methods, can incorporate continual improvement processes to their advantage. At its core, continual improvement can be defined as an ongoing, progressive transformation aimed at increasing the efficiency with which an organization carries out its objectives. Put simply, it means constantly getting better.

Recognizing the significance of continuous improvement is vital for organizations that aim to operate more efficiently. By implementing this approach, companies can stay ahead of the competition, whether on a small or large scale. Truly successful companies are not content with the status quo; they aspire to ascend to new levels of performance and quality.

Any organization, regardless of well-functioning processes, can leverage continuous improvement methods to achieve even greater results. This involves fostering a culture of innovation and profitability. To effectively implement continuous improvement, companies should prioritize effectively communicating the value and importance of these methods, followed by training their employees and devising a comprehensive plan that incorporates input from all stakeholders.

Six Sigma is an approach that relies on data to eradicate flaws in various business processes, whether in manufacturing or transactions. Its main objective is to enhance quality by minimizing process variation, ensuring consistency and optimal performance. The term "Six Sigma" signifies the number of defective



products expected per million, which is 3.4. (Mason, 2015)

Kaizen, a Japanese term meaning improvement, emerged in Japanese businesses shortly after World War II and is now embraced globally. It aims to eliminate inefficiencies and waste. Front-line employees, who are well-versed in the production cycle, play a crucial role in identifying areas for improvement and sharing essential information. Additionally, Kaizen encompasses a unique cultural aspect that companies must comprehend to align stakeholders' perspectives and transform their organizational culture. (Creative Safety Supply, Continuous Improvement in the Workplace, 2022)

Lean methodology centers around identifying and eliminating activities within the customer flow that do not add value. It encourages employee involvement in bringing about change and optimizing the entire production system to minimize waste. Unlike Six Sigma and Kaizen, Lean doesn't heavily rely on data-driven tools; instead, it emphasizes a set of principles rather than strict, prescriptive practices.

The Continual Process Improvement Model, often associated with the concept of Continuous Improvement or Kaizen, involves the ongoing effort to enhance products, services, or processes through incremental and breakthrough changes. Key principles of this model include a constant strive for perfection, a mindset of looking for better ways to do things, and making small incremental changes that accumulate into significant results. The model draws from methodologies such as PDCA cycle, Six Sigma, Lean, and Total Quality Management to achieve improved quality in products and services. Continuous Process Improvement (CPI) is a related practice that focuses on making incremental changes to business processes for enhanced efficiency and quality.

I would like mention each part of Continuous Improvement



Pic. 1.2.1 The Continual Process Improvement Model (Creative Safety Supply, Continuous Improvement in the Workplace, 2022)

Achieving a work culture centered around process improvement can be accomplished in numerous ways. The challenging part is finding the right approach tailored to the specific industry. Fortunately, all the models for continual improvement share a common focus on enhancing techniques for improvement, albeit with different methodologies.

Continuous enhancements in performance, dedication, strategy, and workflow contribute to the growth of a company's profitability. These four categories also enhance the overall value generated by the facility.

Facilities that prioritize ongoing improvement gradually become more competitive and maintain an advantageous position in their industry. However, this is only feasible if improvement efforts are executed correctly. The key lies in comparing initial data with data collected after implementing changes. This approach helps assess the effectiveness of the implemented solutions.

The idea of continuous improvement encompasses various methodologies used to accomplish a company's future financial, safety, and product objectives. Selecting the appropriate improvement strategies is crucial for optimizing

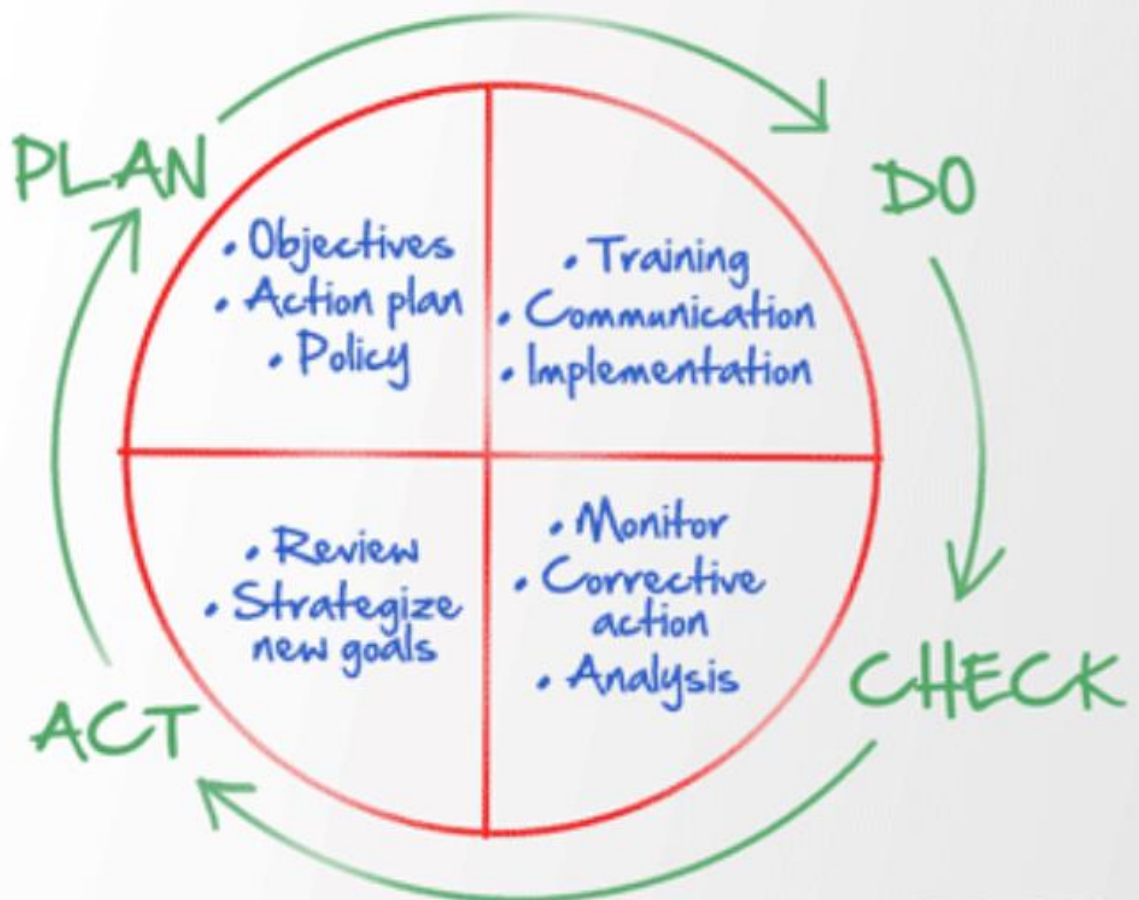
outcomes and ensuring long-term success.

A facility can adopt multiple continuous improvement strategies simultaneously. Different areas of the company, or even separate departments within a given area, can each follow a distinct strategy to maximize results and generate positive impacts.

While there are certainly more than six methods available for continuous improvement, this article will cover some of the most common strategies.

The first method on our list is the useful concept known as "plan, do, check, act," or PDCA. This cyclical process guides an entire company or a small team through four improvement steps. By continuously repeating these steps, the focus remains on ongoing improvement and evaluation.

Each step builds upon the previous one and seamlessly transitions into the next. (Wikipedia, Continual improvement process, 2024)



Pic 1.2.2. The PDCA cycle (PDCA = Plan, Do, Check, Act) (Creative Safety Supply, PDCA Cycle, 2022)

During the planning phase, teams need to evaluate the current standards,

generate ideas to enhance them, determine how to execute those improvements, establish goals, and devise an action plan.

Next, the team should put the plan into action. This involves making the necessary changes to the existing processes, providing any required training, raising awareness among workers, and implementing extra controls to prevent potential issues in the future.

After implementing the changes, workers should take new measurements and compare them with the previous ones. This step is crucial in determining whether any improvements have occurred. The results must be analyzed, and any corrective or preventive actions should be planned to achieve the desired outcome.

Then, management teams analyze all the data from the implemented changes to decide whether they should be permanently adopted or if further adjustments are necessary. Once a change has been fully implemented, the focus shifts to exploring new ways to continue progressing, which then loops back to the planning phase.

Continuous enhancement, based on principles enhances the value, for stakeholders by streamlining processes and minimizing inefficiencies. It serves as the foundation for practices like Six Sigma, Kaizen and the Toyota Production System. Regardless of effectiveness levels companies can leverage these approaches to creativity. Executing these strategies involves communication, training programs and an informed plan involving stakeholders.

The Continual Process Improvement Model is in harmony with Kaizens philosophy that emphasizes improvements. Key concepts include the pursuit of refinement drawing inspiration from PDCA cycles Six Sigma methodologies, Lean principles and Total Quality Management practices. Continuous enhancements in performance metrics commitment levels, strategic planning processes and workflow optimization contribute to increased profitability.

In summary continuous improvement plays a role in enhancing efficiency competitiveness in the market landscape and ensuring long term success by

providing flexible strategies, for ongoing development.

### **1.3 Historical Development of Continuous Improvement in Quality Management**

The history of continuous improvement is vast, encompassing important eras and prominent personalities such as those during the Industrial Revolution, a period marked by advancements in manufacturing and the introduction of methods for enhancing efficiency.

The concept of improvement originated in this era, spanning the 18th to 19th centuries, which witnessed significant progress in industrial practices. It was during this time that structured approaches to efficiency emerged, paving the way for what we recognize today as continuous improvement (Evans & Lindsay, 2019).

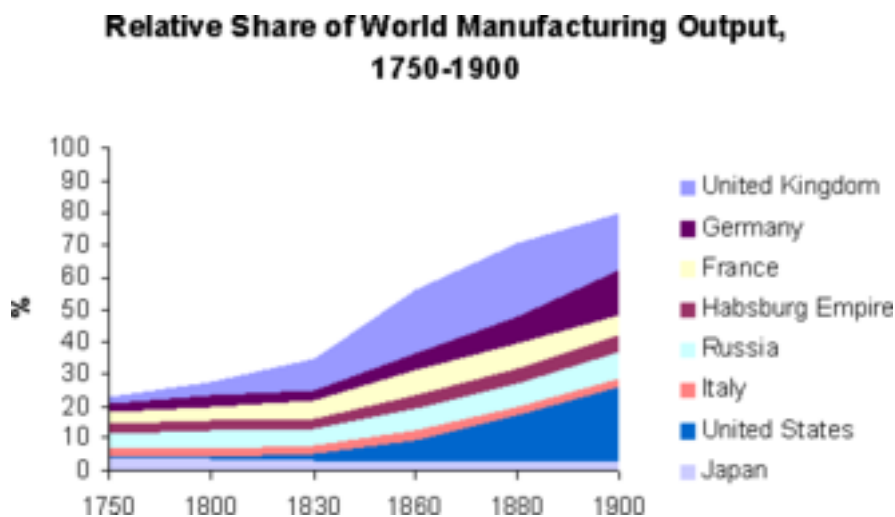
The Industrial Revolution brought about changes in production techniques. Mechanization, steam power utilization, and technological advancements in machinery greatly boosted production efficiency and productivity (Foster, 2021). The drive to enhance manufacturing processes led to the development of methods for improving efficiency. This involved identifying bottlenecks, conducting process evaluations, and implementing strategies to enhance productivity (George, 2018).

Many of the practices associated with continuous improvement today trace their roots back to the Industrial Revolution. The focus on optimizing processes and constantly striving for efficiency laid the groundwork for concepts that would eventually be formalized into approaches to continuous improvement (Martin, 2021). This historical background emphasizes how the Industrial Revolution acted as a catalyst for the development of continuous improvement, inspiring later generations to place a high value on continual progress across a range of fields. (Claudio Gutierrez, 2023)

In summary the section discussing enhancement emphasizes the changing nature of achieving success, in sales. It involves utilizing a variety of strategies

and constantly striving to improve. The step by step process of improvement stresses the significance of analyzing data to pinpoint areas for enhancement. When it comes to dissertations a crafted conclusion should concisely recap the discoveries and provide clear answers to the research objectives. Additionally, the idea of improvement is not limited to sales or dissertations. Also applies to industrial environments like on site production in the construction industry.

Having a grasp of improvement is vital for businesses as it encourages a mindset of seeking ways to enhance operations. In studies creating a conclusion requires more than just summarizing key points; it involves synthesizing them effectively. Overall this section underscores how continuous improvement principles are universally relevant across fields such, as sales strategies, academic research and industrial practices.



Pic. 1.3.1 Relative Share of World Manufacturing Output 1750-1900.

(Wikipedia, Relative Share of World Manufacturing Output, 2024)

American statistician and management consultant W. Edwards Deming helped popularize the idea in the 1950s. Modern continuous improvement strategies, which priorities statistical methods and quality management, have their roots in Deming's beliefs.

The American statistician and management consultant W. Edwards Deming was instrumental in spreading the idea of continuous improvement in the 1950s. Deming's achievements established the groundwork for contemporary tactics of continuous improvement, which priorities statistical techniques and quality

control.

Deming promoted the use of statistical techniques into operational procedures. His conviction that statistical analysis and data should be used to inform decisions became a fundamental component of methods for continuous improvement.

Deming's impact was seen in the field of quality management, as he highlighted the need for a methodical approach to guarantee and improve the caliber of goods and services.

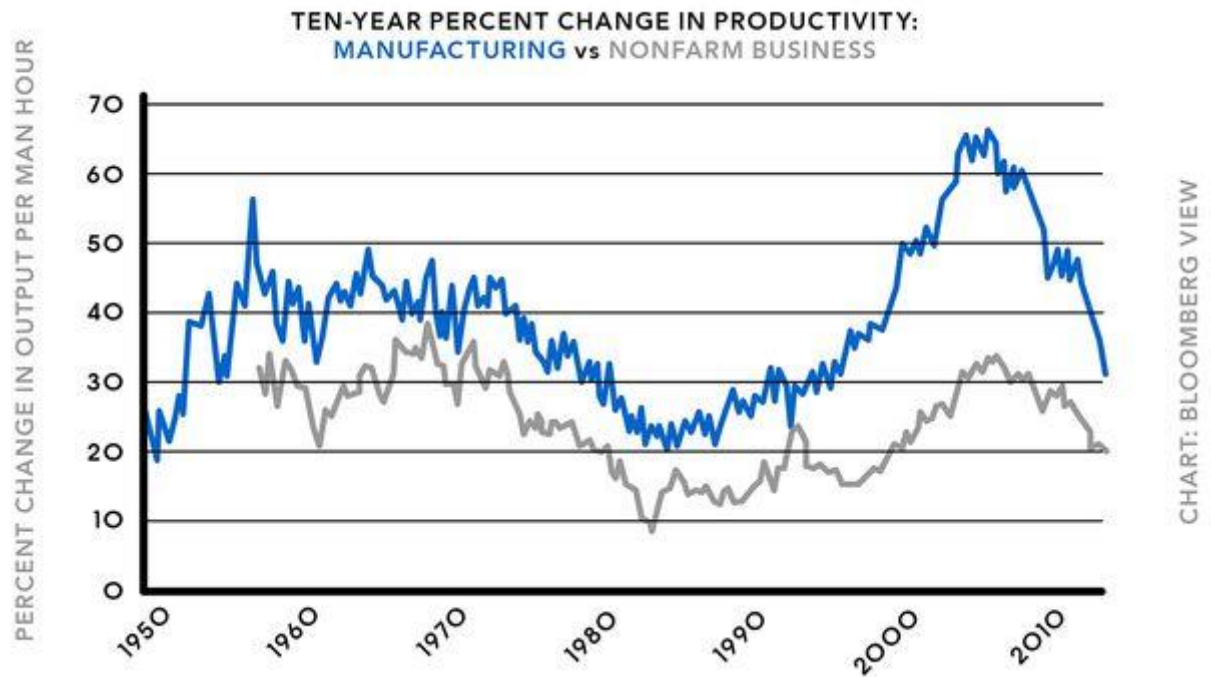
Deming's principles, which are summed up in his well-known Deming Cycle or PDCA (Plan-Do-Check-Act), served as a foundation for companies looking to improve continuously. One essential tool for iterative problem-solving and improvement is still the PDCA cycle.

W. Edwards Deming made groundbreaking contributions in the 1950s that lay the foundation for contemporary continuous improvement initiatives, which are characterized by an emphasis on statistical insights and quality management concepts. (admin, 2020)

Piecework type pay systems often do. Maybe Nucor had a good process that only allowed for (or paid for) the production of high quality steel.

The quality posters and slogans at Nashua Corp (which is surprising since Dr. Deming worked directly with them and Bill Conway). I guess the habits of communicating through posters and slogans die hard?

This chart, with a 10-year running average DOES suggest productivity growth bottomed out in 1980 and got better.



Pic. 1.3.2 10-year percent change in productivity by Mark Graban. (Graban, 2017)

Frederick Taylor's creation of scientific management concepts in the early 20th century is connected to the current idea of continual improvement. Systematic methods to improve quality and efficiency were introduced in this age.

Frederick Taylor, in the early 1900s, introduced scientific management concepts that paved the way for the current notion of continual improvement. Taylor's systematic methods aimed to improve quality and efficiency and became a cornerstone for organizational development. His principles, which stressed standardized processes and worker efficiency, played a role in the evolution of continuous improvement strategies that concentrate on optimizing workflows and ensuring consistent quality.

Taylor's focus on scientifically analyzing tasks and optimizing processes instilled a culture of improving efficiency, aligning with the goal of continual improvement to enhance organizational effectiveness.

Taylor's systematic approach aimed at improving quality through standardizing procedures, a principle echoed in modern continuous improvement

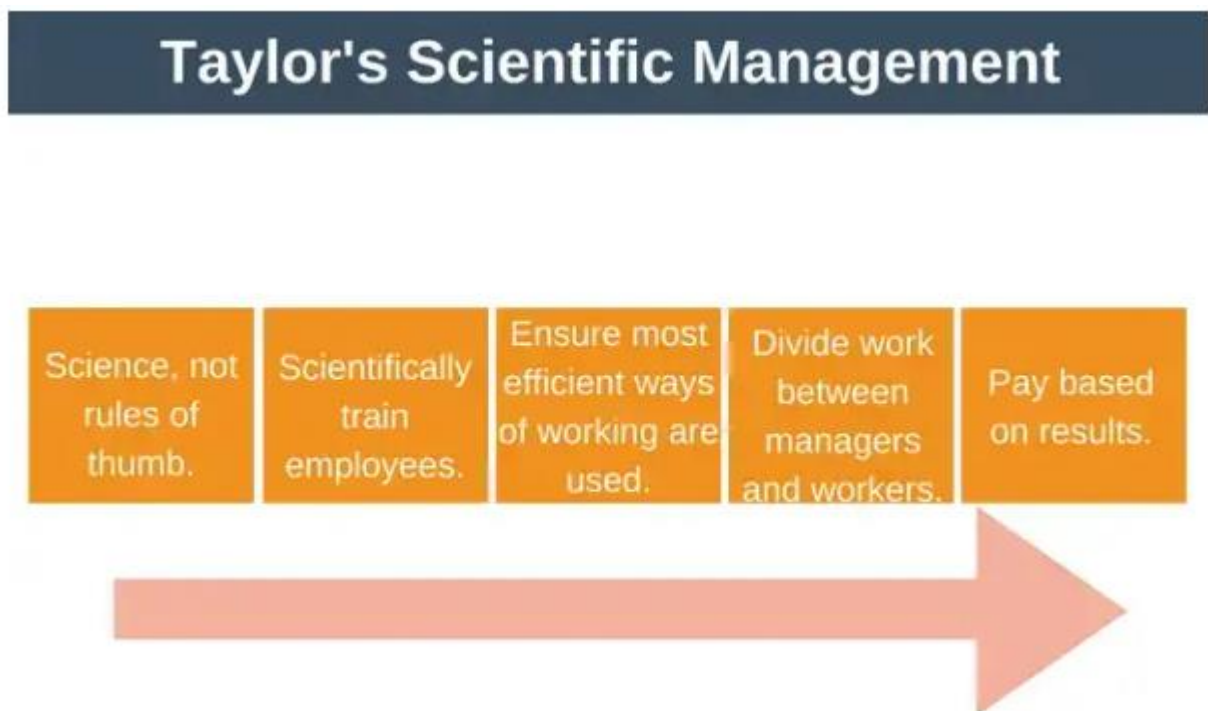


methodologies.

Taylor's ideas created a foundation for embracing change and improvement as integral parts of organizational management, a fundamental concept in the practices of continual improvement.

The principles of scientific management from the early 20th century continue to hold influence, contributing to the ongoing pursuit of efficiency and quality enhancement within the framework of continual improvement.

(BailiffMusicMongoose34, 2024)

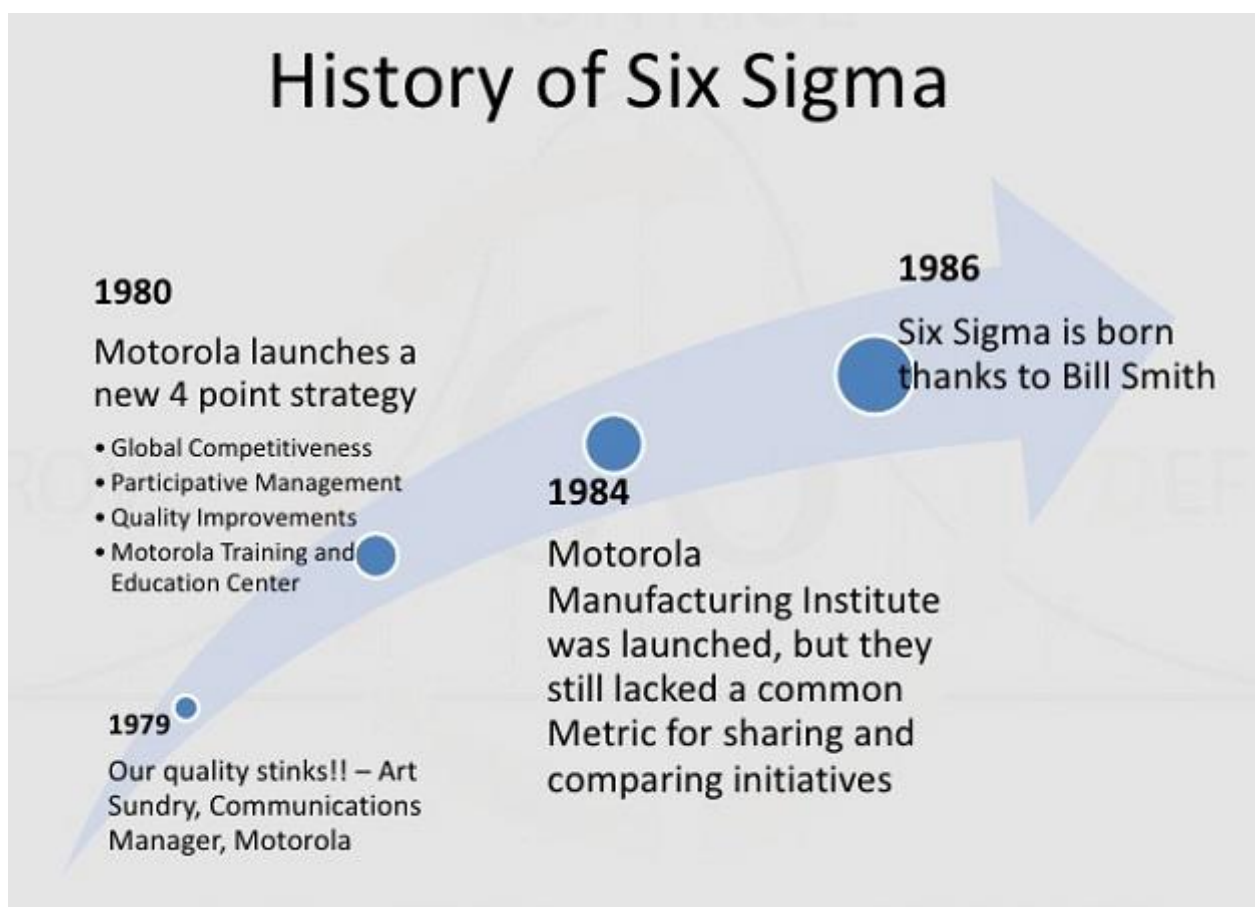


Pic. 1.3.3 Taylor's Scientific Management process. (G., 2024)

Motorola invented the Six Sigma system, which was first implemented in the 1980s. This approach greatly enhanced the field of continuous improvement by reducing errors and raising overall process quality.

Motorola led the way in the 1980s with the introduction of Six Sigma, an innovative approach to continuous improvement. Engineer Bill Smith, an American, devised this groundbreaking method in 1986 with the goal of revolutionizing business processes. The main objective of Six Sigma was to improve overall process quality by systematically reducing errors. Its effectiveness in enhancing efficiency and minimizing defects gained widespread recognition.

The core principle of Six Sigma involves striving for near-perfection, aiming to achieve a maximum of only 3.4 defects per million opportunities. This methodology utilizes statistical methods and data-driven decision-making to accomplish its goals. Additionally, it incorporates Lean principles and other powerful process improvement techniques in order to optimize efficiency and eliminate waste. As a result, organizations across diverse industries started adopting this systematic and disciplined approach as a foundation for achieving excellence. (Lean, 2024)



Pic. 1.3.4 History of Six Sigma (processexam, 2024)

During the 1980s, Motorola experienced success with their creative approach. As a result, they decided to apply the Six Sigma methods to their crucial business processes. This implementation went beyond simple defect reduction, leading to the establishment of Six Sigma as a well-defined in-house methodology within Motorola Inc.

In 1991, Motorola took a step further by certifying its first 'Black Belt' Six

Sigma experts. This marked the beginning of accredited training for the Six Sigma methods.

Around the same time, Allied Signal also adopted Six Sigma and achieved significant progress and cost savings within six months. The CEO of Allied Signal, Lawrence Bossidy, became aware of Motorola's work with Six Sigma and sought advice from Motorola's CEO, Bob Galvin, on its implementation at Allied Signal.

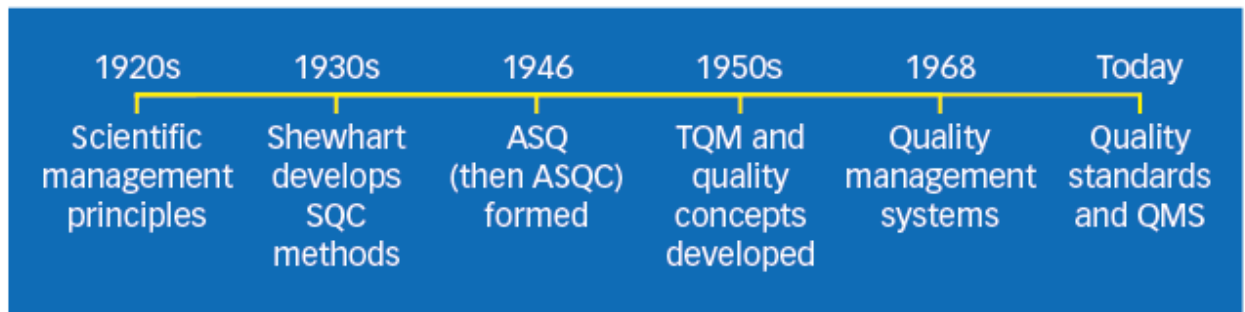
In 1995, General Electric's CEO, Jack Welch, made the decision to implement Six Sigma across GE. By 1998, GE proudly claimed that Six Sigma had saved them more than three-quarters of a billion dollars.

By the mid-1990s, Six Sigma had evolved into a prominent corporate management initiative and methodology. It was particularly embraced by General Electric and other major manufacturing corporations, but it also found its place in organizations outside the manufacturing sector.

By the year 2000, Six Sigma had firmly established itself as an industry. It encompassed training, consultancy, and the implementation of Six Sigma systems in various organizations across the globe.

In a relatively short span of time, Six Sigma gained immense popularity as a methodology for quality improvement and process enhancement. It prompted the development of numerous training, consultancy, and support organizations dedicated to Six Sigma. (processexam, 2024)

The quality management system underwent a transformation from a tool for auditing and inspection to a complete framework that prioritized ongoing improvement. From its early origins to its modern, widely acknowledged form, this development is shown. (St.Hill, 2023)



Pic. 1.3.5 History of total quality management by ASQ. (Handbook, 2024)

The development of the Quality Management System (QMS) is a historical journey that dates back centuries, originating in medieval Europe. During this time, artisans' associations established strict guidelines to ensure the quality of their products. However, it wasn't until the 20th century that significant progress was made.

In the 1920s, Walter Shewhart introduced Statistical Quality Control (SQC), which brought about a shift toward a systematic approach for enhancing quality. Later, W. Edwards Deming played a key role in popularizing SQC during the 1940s, which led to the integration of statistical methods into quality management practices.

The 1980s marked the emergence of Total Quality Management (TQM), which emphasized a comprehensive perspective on quality, with continuous improvement as a fundamental principle. This era laid the foundation for a holistic framework that went beyond mere evaluations and concentrated on overall process enhancement.

Today, the QMS has transformed into a widely embraced and sophisticated system. It integrates global standards like ISO 9000 and nurtures a culture of excellence, efficiency, and ongoing improvement. As such, it has become an essential aspect of contemporary organizational management. (Tricker, 2020)

Quality Management and Continuous Improvement are essential elements in achieving organizational excellence. Quality Management, often exemplified by the concept of Total Quality Management (TQM), focuses on improving the quality of products and services through systematic processes and involving

employees. TQM principles emphasize customer satisfaction, process enhancement, and active participation from all individuals (Juran, 2019).

Continuous Improvement, also known as continual improvement, is an ongoing process that aims to enhance products, services, and processes over time. It involves a dedication to constant innovation and striving for excellence. Continuous improvement plays a fundamental role within quality management, continually enhancing performance and refining processes (Liker & Meier, 2020).

The interplay between Quality Management and Continuous Improvement is readily apparent. Quality Management frameworks, such as TQM, establish a framework for structured improvement that places great importance on satisfying customers and involving employees (Goetsch & Davis, 2020). On the other hand, Continuous Improvement ensures that these processes evolve and adapt to meet changing requirements, fostering a culture of innovation and efficiency (Spear, 2019).

In summary, the concepts of Quality Management and Continuous Improvement go hand in hand to cultivate a vibrant and adaptable organizational culture. By embracing these principles, businesses can not only meet but surpass customer expectations while maintaining operational excellence (Zairi, 2019).

## **CHAPTER 2. QUALITY MANAGEMENT AT BMN LTD.**

### **2.1. Analysis of the company's environment, organizational structure, and economic indicators**

The startup known as Business Media Network LLC (BMN) was launched in January 2022 by the newly formed Association of Students of Ukraine, led by entrepreneur and Ukrainian-American University Concordia (UACU) professor Henry Shterenberg, career technologist Alex Sheyner, and Flash Web founder Oleksii Kozhanov. As of the time of writing this report, Mr. Shterenberg holds the position of President at BMN, Mr. Sheyner serves as the Chief Operating Officer, and Mr. Kozhanov is the Chief Technology Officer.

In a startup environment such as Business Media Network LLC (BMN), quality management is often designed to be flexible in order to swiftly respond to the requirements of the market and the socio-economic challenges. This is especially important in a context such as the current geopolitical crisis in Ukraine. In order to ensure that their operations are resilient, startups, particularly those that were created in settings that were both pressing and tough, often devote attention to agile methodologies. Due to the absence of the bureaucratic delays that are normally experienced by well-established organizations, this technique makes it easier to resolve immediate problems and to implement changes in a timely manner.

For the purpose of effectively supervising quality management, BMN will prioritize the seamless integration of cutting-edge technology and innovative approaches. This will be under the direction of a team that possesses a substantial amount of academic and technological competence. To accomplish this, it may be necessary to make use of data analytics tools in order to continuously monitor and analyze performance parameters. These technologies have the potential to provide instantaneous and valuable information regarding the efficiency of processes, the level of satisfaction experienced by clients, and the effectiveness of various operations. Having access to this information is necessary in order to arrive at decisions that are well-informed and timely.

In addition, taking into consideration the fact that the startup's primary purpose is to prevent the degradation of the economy, BMN would most likely design a quality management system that integrates robust risk management components. It is essential to take a proactive approach to quality management in order to effectively control risk in conditions that are unstable. In order to accomplish this, it is necessary to identify potential dangers in advance and to devise efficient strategies to reduce their impact. It is possible that this will need the utilization of scenario planning and contingency management, as well as the utilization of predictive analytics in order to anticipate probable future barriers and preemptively build solutions.

Continuous improvement, which is an essential component of quality management, will be promoted in BMN by means of frequent training sessions and seminars for all staff. These sessions will emphasize the value of quality and efficiency. When working in high-pressure environments, learning and development are absolutely necessary since they ensure that the team is always up to speed with the latest industry standards and best practices, regardless of any external limitations that may be present.

Participating in collaborative efforts with international partners and experts in fields that are crucial to the revitalization of Ukraine's economy could potentially make a substantial contribution to the strategy that BMN employs to guarantee high quality management standards. Not only would this make it easier to introduce fresh points of view, but it would also make it easier to adopt procedures that are recognized internationally and can be adapted to meet the requirements of the local community. It is possible to simplify these encounters by utilizing digital platforms, which will allow for the greatest possible impact of the knowledge and expertise that is imparted.

The quality management technique that BMN will implement would be included into its core activities, with an emphasis placed on adaptability, proactive risk management, and uninterrupted education. This strategic approach not only corresponds with the short-term goals of the company, but it also ensures that the company will successfully contribute to the broader economic stability of Ukraine.

According to BMN, one of the most important aspects of quality management

is the incorporation of a customer-centric management strategy. The company recognizes the importance of customer feedback as a vital resource for continuous improvement and acknowledges its worth. The startup makes use of advanced customer relationship management (CRM) systems in order to collect and assess feedback from customers in a methodical manner. By making use of these data, BMN is able to continuously improve their products and services, ensuring that they not only meet but also exceed the expectations of its customers. BMN was able to ascertain, through the utilization of feedback analytics, that 85 percent of their customer places a high priority on having prompt access to service support assistance. It was because of this that the company decided to improve its customer service operations, which ultimately led to a reduction of response times by approximately forty percent.

Additionally, the implementation of Lean principles into BMN's operating procedures demonstrates the company's commitment to improving efficiency. There is a correlation between the use of lean management practices, such as value stream mapping, and the identification and removal of process waste, which ultimately leads to an improvement in both manufacturing efficiency and product quality. An illustration of this is the recent overhaul that BMN performed on their content distribution process. During this process, they discovered that there was redundancy in the steps of content approval. It was via the process of streamlining these procedures that they were able to successfully reduce the amount of time that passed between the initial development of information and its publication by a quarter, so significantly improving their capacity to rapidly respond to the demands of the market.

Additionally, BMN places a high priority on workforce participation in quality management. There is a widespread agreement that the quality of the work that employees do improves when they take responsibility for their work and are actively participating in the process. BMN fosters a culture that encourages and motivates employees at all levels to actively contribute their ideas and solutions, and it provides support for them to do so. On a regular basis, holding brainstorming sessions and



innovation workshops results in the generation of a great deal of ideas for enhancement. An employee recommendation, for instance, led to the automation of some repetitive data entry tasks. This was accomplished through the implementation of the recommendation. In addition to reducing the number of errors caused by human intervention by fifteen percent, this allowed the staff to devote more time to their strategic tasks.

BMN makes use of real-time monitoring systems in order to adjust to the ever-changing market conditions, which is especially important in an economic environment that is prone to volatility. These systems provide a complete overview of a number of performance factors, which enables management to make decisions more quickly. BMN is able to quickly adjust its strategies in response to sudden shifts in market trends, which is a demonstration of the company's agile methodology for management. During a recent market slump, BMN was able to quickly modify their operational priorities to concentrate on the most lucrative product lines, which resulted in a small effect on their income. This demonstrated the versatility of BMN, which proved to be helpful.

Furthermore, the significance of ethical and sustainable elements is expanding in the field of quality management, particularly for businesses like BMN that operate in socio-economically disadvantaged environments. This is especially true for businesses that are in the process of implementing quality management. BMN demonstrates its commitment to environmentally responsible business practices by selecting its suppliers with great care and operating its resource management processes in an efficient manner. A strategy has been formed within the company with the purpose of decreasing waste by thirty percent within the next five years through the adoption of recycling and energy-saving initiatives. The company gives precedence to suppliers who follow sustainable practices and has established an internal policy with this objective.

By putting these measures into effect, BMN not only ensures that their products are of an exceptionally high quality, but it also has a positive impact on the entire economic structure of Ukraine. This demonstrates that quality management plays an

essential role in both the prosperity of businesses and the welfare of society. Through the implementation of these comprehensive quality management methods, BMN sets a standard for startups that are working in challenging conditions. As a result, this illustrates that businesses are capable of achieving success and bringing about positive change even in the most challenging circumstances, provided that they implement the necessary strategies.

Originally created to coincide with the development of the Ukrainian economy and infrastructure during peaceful times, Business Media Network now serves as a mean to prevent the collapse and counter the rapid decline of the Ukrainian economy, which continues to be impacted by the Russian invasion since February 24, 2022

BMN Ltd, a company based in Ukraine, has implemented strong quality management procedures based primarily on its comprehensive Quality Policy. This policy serves as the cornerstone of their dedication to excellence, outlining essential values that guide their organizational goals.

BMN's Quality Policy emphasizes several key values that underpin their quality management procedures. These values encompass a strong commitment to exceptional performance, establishing and accomplishing challenging objectives, and promoting profitable growth in their operations.

BMN actively engages in collaboration with clients to facilitate the implementation of effective quality management procedures. This collaborative approach ensures that the specific needs and goals of each client are taken into account, tailoring the quality management systems to meet their requirements. This client-oriented approach highlights their commitment to delivering superior performance.

BMN's approach to quality management extends beyond internal objectives, encompassing strict adherence to industry standards. By aligning their practices with recognized standards, BMN ensures that their processes are measured against established criteria, contributing to overall quality assurance. (Bystrov, 2022)

The company is still in its early stages of development, thus it is only now

starting to draw in investors and accumulate its money and financial assets. Consequently, the financial and economic activity plan, which will take into account capital and current estimates and predictions of financial indicators, is still in the development.

Business Media Network LLC is just now beginning to participate in international business endeavors; this is one of the company's objectives. It is important to note that a company faces fierce worldwide competition when it enters a foreign market. Without the innovative and adaptable application of sophisticated marketing techniques, it is hard to operate effectively in international markets. These techniques include selecting the right sales organization, managing the activities of trade intermediaries, and selecting and utilizing a range of business activity, advertising, and sales stimulation techniques. The following has to be considered for work to be done effectively in the external environment: characteristics of the law as it exists today, international regulations, the social and cultural context, customs, financial settlement and currency laws, policy, etc.

When comparing the effectiveness of management in information services companies to that of industries like as metallurgy, there are a number of factors that are taken into consideration. These factors highlight both similarities and differences in the ways that these companies take to quality management.

The inherent qualities of the goods and services that are offered by these companies constitute one of the most significant differences between them. The majority of the items that information services firms deal with are intangible, such as software, digital content, or online platforms. These intangible goods are fundamentally different from the tangible objects that are made in the field of metallurgy. This fundamental difference has an effect on the strategy that is taken to quality management in each domain.

When it comes to information services, quality management is largely concerned with ensuring the dependability, user-friendliness, and security of digital products. To maintain high-quality standards, software companies place a

great priority on writing code that is free of bugs, providing user-friendly interfaces, and implementing extensive cybersecurity precautions. Metallurgical companies place a high priority on aspects such as the durability and lifespan of their products, as well as their conformity with industry standards and rules. There is a significant disparity in the criteria that are used to evaluate quality between the two industries as a result of the intrinsic qualities of their respective goods.

In addition, the operational processes and workflows in the field of information services are often more dynamic and iterative in nature. This is in contrast to the highly structured and standardized procedures that are typically observed in the field of metallurgy. Agile techniques, frequent software upgrades, and rapid prototyping are prevalent practices in the information services industry. These practices are utilized in order to promptly respond to the ever-changing demands of the market and revolutionary technological advancements. On the other hand, metallurgical operations normally follow to stringent protocols and standards in order to guarantee that the quality of the product is consistent and that safety laws are taken into consideration.

Nevertheless, in spite of these differences, both industries adhere to the same concepts which are important to quality management. Both the public and private sectors place a huge amount of importance on the significance of continuous development and making sure that customers are satisfied. Companies that provide information services frequently solicit feedback from customers and conduct usability testing in order to continuously enhance their offerings. On the other hand, organizations that deal in metallurgy implement quality control systems throughout the production process in order to remove defects and fulfill the criteria of their customers.

In addition, the introduction of quality management standards and certifications is widely supported by both of these industries. By adhering to standards such as ISO 9001 for the management of quality systems or ISO/IEC 27001 for the management of information security, firms that provide information services may be able to demonstrate compliance with these standards.

Metallurgical companies generally adhere to industry-specific standards for metallurgical testing and quality assurance. These standards may be established by organizations such as the International Organization for Standardization (ISO) or the American Society for Testing and Materials (ASTM) International.

As a result of the inherent scalability of digital products, firms that provide information services have a distinct advantage in terms of the operational efficiency of their operations. Without requiring a significant amount of physical infrastructure, these businesses are able to rapidly expand their operations in order to satisfy the ever-increasing demand, which ultimately leads to increased productivity and cost-efficiency. On the other hand, metallurgical companies face challenges that are related with production methods that need a substantial number of resources, compliance with environmental regulations, and variations in the market and market conditions. It is possible that these challenges will have an effect on the operational efficiency and profitability of the individual.

Additionally, despite the fact that the quality management systems utilized by the information services and metallurgical industries are distinct from one another, both industries place a significant emphasis on the provision of better products and services that are in accordance with industry standards and satisfy the requirements of their customers. It is possible for businesses operating in both sectors to develop their competitive edge and maintain long-term success in their respective markets by utilizing technology, innovation, and activities that include continuous improvement.

In order to make a fair comparison between quality management in the information services industry and metallurgy, it is essential to take into account the influence of technological advancement and innovation. Many firms that provide information services are significantly reliant on technology-driven solutions in order to enhance the quality of their products and services. It is becoming increasingly common to make use of artificial intelligence (AI), machine learning (ML), and data analytics in order to improve operations, personalize user experiences, and anticipate market trends. According to the

findings of a recent study that was carried out by McKinsey, businesses who invest resources in artificial intelligence (AI) and machine learning (ML) technologies often see a significant increase in productivity of twenty-five percent and a significant reduction in operational costs of thirty percent.

The employment of new technology in the field of metallurgy, on the other hand, is not as common as it is in other industries. This is mostly due to the distinctive qualities that are associated with the field. On the other hand, organizations in the metallurgical industry are gradually adopting digitization initiatives in order to improve the efficiency of their processes, establish quality control, and ensure environmental sustainability. According to the World Economic Forum, the implementation of Internet of Things (IoT) sensors and predictive maintenance systems in steel production plants has the potential to reduce downtime by fifty percent and cut maintenance expenses by twenty-five percent.

Additionally, the legislative framework has a significant influence on the adoption of quality management systems in both of the aforementioned businesses. It is necessary for firms that provide information services to be able to effectively manage complex data privacy regulations, such as the General Data Protection Regulation (GDPR) in the European Union and the California Consumer Privacy Act (CCPA) in the United States. Should one fail to comply with these requirements, they may be subject to significant financial fines, suffer damage to their reputation, and see a decline in the confidence of their customers. In accordance with the findings of a poll that was carried out by PricewaterhouseCoopers (PwC), ninety percent of consumers are likely to have a higher level of trust in businesses that adhere to data privacy rules.

Metallurgical companies are also required to comply with stringent environmental regulations. These criteria are intended to reduce pollution, protect resources, and address the consequences of climate change with the goal of addressing these issues. In the United States, in order to demonstrate compliance with regulations such as the Clean Air Act and the Clean Water Act, it is necessary

to make substantial investments in pollution control technologies and environmentally responsible practices. Nevertheless, these expenditures have the potential to create long-term rewards, such as enhanced environmental performance, improved brand reputation, and heightened market competitiveness.

Furthermore, a crucial component in maintaining high-quality management in these businesses is the workforce's ability to possess the necessary skills and competencies. Employees that are skilled in areas such as software development, data analysis, cybersecurity, and user experience design are required by organizations that provide information services. According to information provided by the Bureau of Labor Statistics, it is anticipated that the employment rate in fields related to computer and information technology would expand by 11% between the years 2019 and 2029. This growth rate is much greater than the average growth rate for all occupations collectively.

Individuals that are highly skilled and with experience in metallurgy, materials science, engineering, and quality control are essential to the success of metallurgical businesses. In spite of this, metallurgical companies are confronted with significant challenges as a result of the growing average age of their workforce and the expertise gap that exists within the manufacturing sector. According to the findings of a survey conducted by Deloitte and The Manufacturing Institute, it is anticipated that the manufacturing sector would have a shortage of competent personnel, which will lead to around 2.4 million job openings between the years 2018 and 2028.

To summarize, although there are differences in the approaches to quality management that are utilized by the information services industry and the metallurgy industry, both industries face comparable challenges and opportunities when it comes to ensuring the quality of their products, adhering to regulations, fostering technological advancements, and improving their workforce. Organizations in both industries have the potential to maintain their competitive edge and support sustainable expansion in the global market if they make use of their individual advantages and aggressively tackle the challenges that they face.

As the company is based in the Ukraine and intends to market itself as an international platform, engaging in foreign economic activities will be essential. The company has advantages and is very competitive.

Since the company's direct competitors are few in the Ukrainian market, I will compare and emphasize BMN's advantages using the most comparable initiative now in use. The UNDP is supporting Ukrainian entrepreneurs with this project.

With funding from the European Union, the United Nations Development Programme (UNDP) is carrying out the initiative in Ukraine.

Supporting small and medium-sized businesses that keep running during a war is its primary objective. Some of them are still employed in areas under Ukrainian government control, while others were compelled to move their companies from eastern and southern Ukraine.

The initiative offers a start-up kit and free website development for businesses looking to present and sell products or services online.

In Ukraine, micro, small, and medium-sized businesses account for 20% of GDP and almost 60% of employment. It is crucial to give businesswomen and entrepreneurs comfortable working and profit-making opportunities in order to revive the state's economy, which was severely damaged by a full-scale conflict.

One of the projects in this process is the creation of free websites. Since an online store is a useful instrument for conducting business, moving entrepreneurial and businesswomen's operations online will strengthen their ability to withstand setbacks, restock local budgets, and eventually aid in the recovery of the labour market.

## **2.2 A Quality Management System**

We may infer where Business Media Network wins and where it loses from this.

1) It has a proper investment and reputation because it is a UN development programme. Regarding the latter, one could argue that, given the UN's shown



incompetence and lack of assistance during the Russian-Ukrainian War, it is utterly useless. Being a fledgling project and not being able to solidify its reputation, the BMN has the important advantage of being a project made by Ukrainians for Ukrainians. Since only Ukrainians are aware of their most pressing needs, the BMN stands a greater opportunity of winning back Ukrainian trust at a time when the UN has lost it.

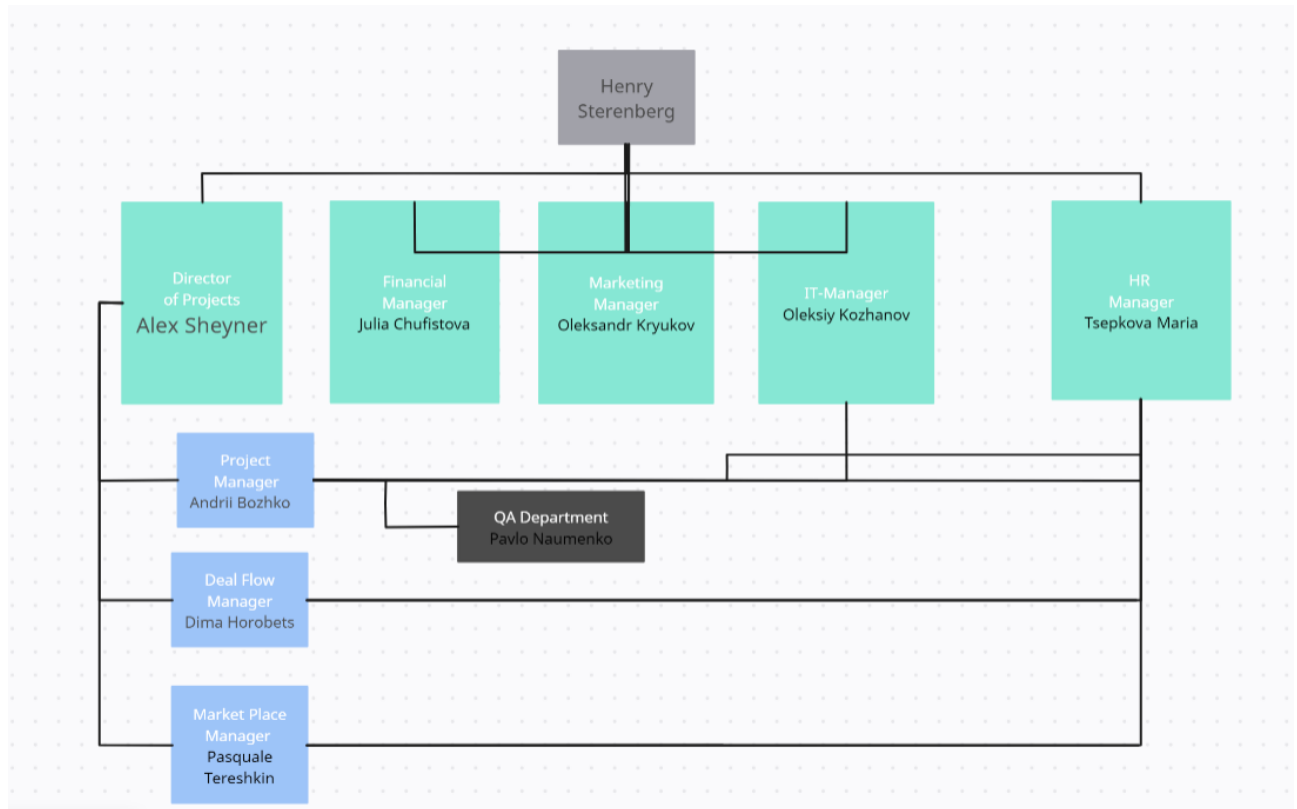
2) Only 30 eligible participants can get grant funding from the development programme. Furthermore, only participants from specific regions of Ukraine may be included, despite the fact that affected individuals are known to reside throughout the nation. BMN serves and seeks to assist business owners throughout all of Ukraine; those who are occupied or have sustained significant losses as a result of armed conflict are given priority.

4) The company spans multiple platforms delivering a far wider range of services and is working on side projects.

5) Although the company is still in its initial phase, it already has a foundation of motivated people capital that produces new ideas and improves the project daily.

There is also a section on Ukrainian cities on the platform with a similar style, but with interviews with the mayors of these places. (Tereshkin, 2022)

The company's organizational structure resembles a matrix structure the most. It is the most intricately linked system.



Pic. 2.2.1 Matrix organization structure

In this organizational model, known as the matrix structure, employees report to multiple bosses at the same level, akin to the functional structure. Each area has its director, alongside an overall director. Employees within this structure often work on various projects under different supervisors.

One advantage of the matrix structure is the sharing of responsibilities among department leaders. Additionally, having an operational manager overseeing the company's platforms is crucial. This individual fosters a conducive work environment and engages with the staff directly.

While the department director supervises projects and tasks, the project director focuses on resource allocation, guidance, and recommendations. This clear division of roles is especially effective for corporations with three platforms, ensuring a smooth workflow through direct communication across all management levels.

Overall, the matrix structure facilitates efficient collaboration and resource utilization, making it suitable for complex organizations with diverse projects and

platforms. Its emphasis on clear roles and communication channels enhances productivity and ensures effective project management.

The primary financial indicator that may be used to generalize the outcomes of an enterprise's economic activities is profit. After paying for material and comparable expenses, wages, bank loan interest, taxes as required by Ukrainian law, other budgetary obligations, and allocations to sectoral investment funds, the company's net profit is still available for use. The planning-economic department is in charge of organizing planning and overseeing plan execution. Its duties include creating the framework for the enterprise's required plans, organizing work on those plans (the nature of which is accepted by the enterprise management), and submitting those plans to the enterprise's governing bodies for approval together with:

- Development of normative planning documents (types and structure of plans) for the structural and functional departments of the enterprise;
- Creation of technical and economic forecasts for the enterprise's most significant activities;
- Coordination of plans of all departments within the enterprise;
- Control of the execution of plans for the enterprise as a whole as well as its distinct structural and functional subdivision.

Along with upper management, members of the planning and economic department staff create the company's strategy. They also choose and defend the organization's financial goals and analyze and assess the enterprise's projected and actual outcomes. To coordinate their efforts in the development of specific types of projects, the departments of planning and economics communicate with marketing, sales, financial services, and other departments.

All of the company's services, both functional and production-related, were planned for.

The economic-statistical, analytical, balance, and normative approaches form the foundation of Business Media Network's planning and analytical work.

The organization uses software that is up to the highest standards for planning

and analysis. Every software item has a license. For a startup, the level of analytical efficiency of the stated indicators is extremely high. The balance sheet and the company's financial performance report serve as the foundation for the study of the outcomes of economic activity.

### **2.3 Analysis of Key Quality Metrics**

An explanation of LLC's strategic goals and objectives "Business Media Network" will enable it to adjust to the effects and fluctuations in the economic market not only in Ukraine but also internationally, given its strategic relevance to the state economy over the medium term.

The company's internal and external environments are analysed using the SWOT method. The SWOT-analysis approach entails first determining the opportunities and threats in the company's external environment as well as the strengths and weaknesses in its internal environment. The relationship between these elements is then established and may be utilised to develop the company's strategy.

Now, let's apply the SWOT analysis to examine the company's internal and external environments.



Pic. 2.3.1 SWOT analysis of BMN

The company's prospects, risks, and strengths and weaknesses should all be considered when planning Business Media Network LLC's future strategic directions. For Business Media Network LLC to transition from a start-up to a major participant in the market, it should focus on releasing its products as quickly as feasible. Simultaneously, it's important to reevaluate the business's shortcomings: optimisation of the organization's management structure, which enables management to be more closely involved in departmental operations and gain a better understanding of the workings of the business; reevaluate all potential avenues for attracting investments and capital to grow the business and inspire employees; enhance the marketing and sales division for a successful market entry; to create crucial protocols for the organization's operations in a war-torn environment and to mitigate risks; to hire more people; and to hire more people.

To summarize, BMN is committed to delivering exceptional performance and working closely with clients, as evident in our customized quality management systems that adhere to industry standards. Our dedication to financial stability encompasses various activities such as generating equity, maximizing resource efficiency, engaging in strategic planning, and effectively navigating the complexities arising from the ongoing conflict in Ukraine.

Recognizing the significance of entering the global arena, BMN understands the importance of strategic marketing and adjusting to foreign legal, cultural, and financial landscapes. We analyze internal and external factors using SWOT analysis, allowing us to make well-informed decisions and establish a strong foundation.

Our organizational structure, based on a matrix model, promotes efficient communication, shared responsibilities, and streamlined operations. Moving forward, BMN's future strategies prioritize accelerating product launches, optimizing management structures, attracting investments, strengthening marketing and sales endeavors, establishing protocols to operate in challenging environments, and expanding our workforce. These initiatives are essential steps for our transition from a startup to a major player in the market, ensuring consistent growth and success for BMN in the ever-evolving business landscape.

## CHAPTER 3. CONTINUOUS IMPROVEMENT INITIATIVES IN QUALITY MANAGEMENT AT BMN LTD

### 3.1 Initiatives and Strategies for Continuous Improvement in Quality Management

This paper conducted extensive research on continuous improvement in quality management used by companies to achieve successful management in the business. BMN LTD conducted a thorough analysis of its existing processes to identify inefficiencies and bottlenecks. By utilizing process mapping and analysis, the company streamlined its operations by eliminating unnecessary steps, consolidating tasks, and improving process flow. When I worked there, I suggested various process improvements, such as holding meetings to monitor situations, so that every employee understood the company's direction. I also proposed a program that would automate monotonous work for the employees, but the management rejected it and created its own, which was not as effective.

```

register_activation_hook(self::FILE, array($this, 'activation'));

// register action handlers
if (is_dir(self::ROOT_DIR . '/actions')) if (is_dir(self::ROOT_DIR . '/actions')) foreach (PMXI_Helper::safe_glob(self::R
    require_once $filePath;
    $function = $actionName = basename($filePath, '.php');
    if (preg_match('%^(.+?)[_-](\d+)%', $actionName, $m)) {
        $actionName = $m[1];
        $priority = intval($m[2]);
    } else {
        $priority = 10;
    }
    add_action($actionName, self::PREFIX . str_replace('-', '_', $function), $priority, 99); // since we don't know at th
}

// register filter handlers
if (is_dir(self::ROOT_DIR . '/filters')) foreach (PMXI_Helper::safe_glob(self::ROOT_DIR . '/filters/*.php', PMXI_Helper::
    require_once $filePath;
    $function = $actionName = basename($filePath, '.php');
    if (preg_match('%^(.+?)[_-](\d+)%', $actionName, $m)) {
        $actionName = $m[1];
        $priority = intval($m[2]);
    } else {
        $priority = 10;
    }
    add_filter($actionName, self::PREFIX . str_replace('-', '_', $function), $priority, 99); // since we don't know at th
}

```

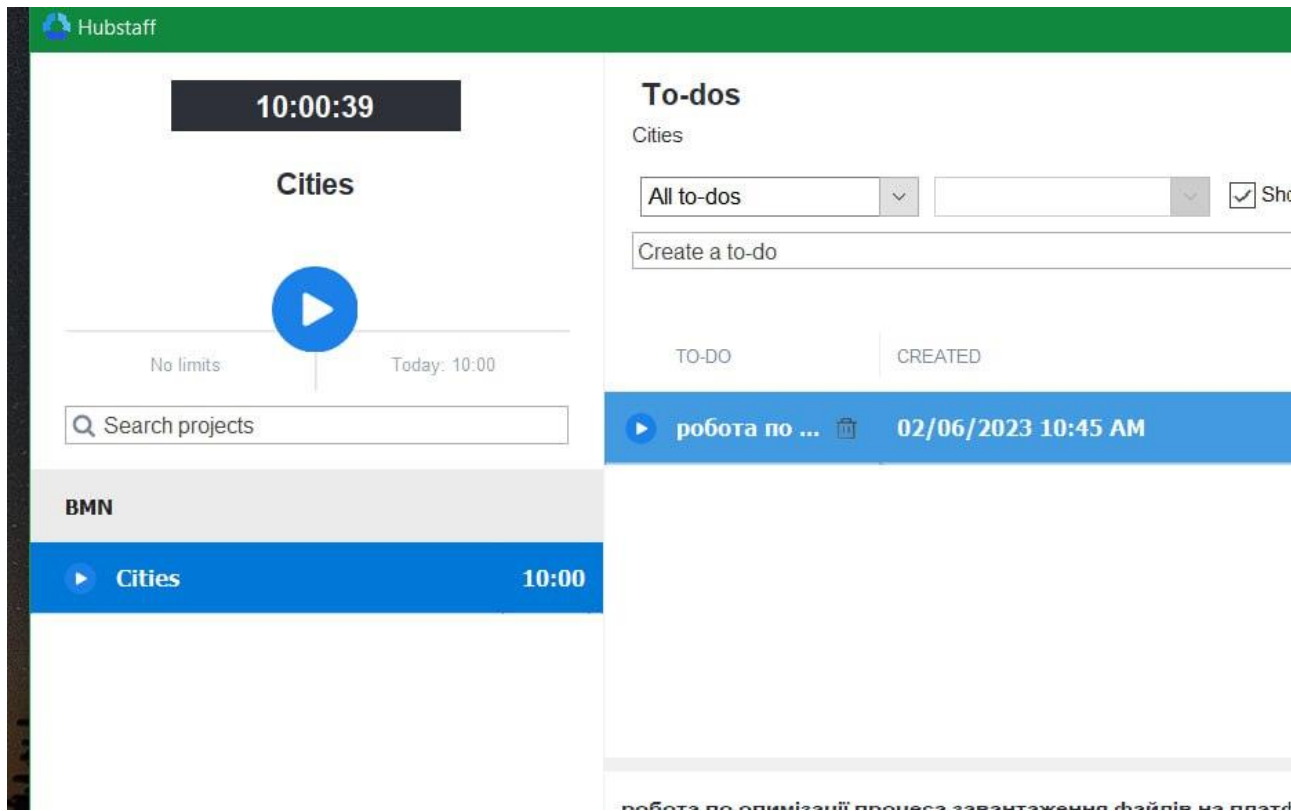
Pic. 3.1.1 Code of Parser

The company implemented measures to eliminate redundancies in its activities. This involved identifying repetitive processes or activities that did not

add value and consolidating or eliminating them to streamline operations and reduce waste. BMN LTD optimized its work processes to ensure tasks were completed in the most efficient sequence. This involved reorganizing work sequences, standardizing procedures, and implementing automated or technological solutions to increase productivity and reduce cycle time. The company invested in training programs to provide employees with the skills and knowledge they needed to perform their roles effectively. In addition, BMN LTD empowered its employees to propose process improvements and participate in decision-making processes, fostering a culture of continuous improvement throughout the organization. BMN LTD utilized technology solutions such as workflow management software, enterprise resource planning (ERP) systems, and data analysis tools to streamline operations. By harnessing the power of technology, the company improved data visibility, decision-making processes, and overall operational efficiency. The company established key performance indicators (KPIs) to measure and monitor improvements in operational efficiency. Regular performance reviews and audits were carried out to track progress, identify areas for further improvement, and ensure sustainability of performance improvements over time. Overall, the implementation of continuous improvement initiatives at BMN LTD has led to a significant increase in operational efficiency, allowing the company to more effectively achieve its strategic goals and maintain a competitive advantage in the market.

BMN LTD has implemented strict quality control measures throughout the manufacturing process, which involves conducting thorough inspections at every stage of production to quickly identify and eliminate any defects or deviations from quality standards. This ensures that only products that meet pre-defined quality criteria enter the market. To monitor employee productivity and provide emergency assistance, the Hubstaff monitoring system was proposed.





Pic. 3.1.2 Hubstaff working time

It collected data from each city, but there were sometimes cases when the program provided by the management stopped working for colleagues. In such instances, I was able to quickly understand and eliminate the problem.

To promote quality consciousness throughout the organization, BMN LTD has invested in comprehensive employee training programs focused on management and quality assurance. These programs aim to educate employees about the importance of quality, teach them to identify potential quality problems, and train them in the proper use of quality control tools and techniques. The company benchmarks its quality management practices against industry standards and best practices, such as ISO standards or Six Sigma principles, to ensure that its quality management processes conform to global standards of excellence. This helps the company to consistently deliver the highest quality products to its customers. BMN LTD actively solicits customer feedback on product quality and performance to identify areas for improvement and prioritize quality improvement initiatives. By listening to and proactively addressing customer concerns, the company demonstrates its commitment to delivering products that not only meet

but exceed customer expectations. To ensure continuous quality improvement, BMN LTD regularly reviews its quality metrics, analyzes trends, and takes corrective action to address any identified issues or deficiencies. This iterative approach to quality improvement has ensured that BMN LTD remains at the forefront of quality excellence in its industry.

I proposed ideas to improve quality at BMN LTD, including stringent quality control at every stage of production, employee training programs, customer feedback solicitation, benchmarking against industry standards, and continuous quality improvement practices. These efforts have resulted in a steady increase in product quality, allowing the company to maintain its competitiveness in the market.

During the time when I was working as regular worker my working sheet was like this:

1	А	В	С	Д	Е	Ф	Г	Н	І	Ј	К
2	пн	4:21:20	30	Андрей							
3	вт	2:59:10	108								
4	ср	1:12:05	45								
5	чт	1:27:16	51								
6	пт	1:54:56	87								
7	сб	3:23:14	162								
8	нд	0:39:59	27								
9	All	15:58:00	510								
10	In Process	19. Nav menu	Сміла								
11	Done	14. Спортивне життя	спортивні зали та клуби								
12	Done		фітнес студії, тренажерні зали								
13	Done		спортивні федерації								
14	Done		спортивні об'єкти								
15	Done		спортивні школи та секції								
16	Done		спортивно-оздоровчі центри								
17	Done		теніс, сквош								
18	Done		бойові мистецтва								
19	Done		басейни, школи плавання								
20	Done		персональні тренери								
21	Done		школи танців	Не робить							
22	Done		приськопитові бази								

Pic. 3.1.3 Working sheet Smila city

There was all information by my first week working in the company. In case working harder and spend more time doing the same work. I was promoted to manager of City Show Case. That was new department where I should make a really good improvement in quality management.

	A	B	C	D	E	F	G	H	I	J	K
1	Andrey Bozhko										in progress
2	Cities Showcase manager										done
3	Item	Status	Priority	Name	Description	Updates/Notes	Assigned	Due Date			repeated
37	34	(work now)	High	Find 3 platforms	Make calls with 3 top seo platforms (Henry, Polina, Sasha, Andrii)		Henry				
38	25.07.2022-29.07.2022										
39	36		medium	Page indexing control	Check the work, what is happening in them and fully understand everything about indexing		Henry	2 weeks			
40	37		medium	Report how many pages are indexed			Henry	2 weeks			
41	38		medium	Дітва	1. Finding 2. Handing over to Oleksiy 3. Finding the solution. 4 Solution 5. Verification		Henry	2 weeks			
42	40		medium	Standardize the report submission form between Dilma and Pasha (Electronic form)			Henry	2 weeks			
43	41	(work now)	medium	See what others are selling. What offers do they offer for the market. What can we offer?			Henry	2 weeks			
44	42		medium	Quality assurance			Henry	2 weeks			
45	43		medium	Coordination of the work			Henry	2 weeks			
46	44		High	Find resource of SEO			Henry	2 weeks			
47	45		medium	Disassemble the autofill program	Application internal testing and QA testing		Henry	2 weeks			
48	46		done	Analyze the creation of cities with Oleksiy	Learn how to create a site and fix buggy sites		Oleksii	2 weeks			
49	47	(work now)	medium	Make 1400 cities	Make first part of process		Oleksii	2 weeks			
50	48		High	Find 3 platforms	Make calls with 3 top seo platforms (Henry, Polina, Sasha, Andrii)		Henry	2 weeks			
51	49		High	Nav menu 49 cites	done						
52	50		done	Created cites 47	done						

Pic. 3.1.4 Manager report for 1 week

This report can show you with what kind of tasks the department deals with.

During the all-time as I was working there I tried to improve everything that was near “my hands”. And all the time I asked to have more and more power to improve all things that was possible.

### **3.2 Challenges of Integration of Continuous Improvement Initiatives in Quality Management**

In today's rapidly evolving business landscape, organizations are continuously seeking ways to improve their operations, enhance customer satisfaction, and maintain a competitive edge. One of the most effective approaches to achieving these objectives is through the integration of continuous improvement initiatives into quality management practices. For companies like BMN Ltd, a commitment to delivering exceptional services necessitates a strategic focus on quality enhancement and process optimization. However, while the benefits of implementing continuous improvement initiatives are undeniable, the path to successful integration is not without its challenges.

At BMN Ltd, the journey towards integrating continuous improvement initiatives into quality management is met with a diverse array of obstacles, each presenting unique complexities and requiring thoughtful consideration. One of the primary challenges faced by the organization is the inherent resistance to change among employees. As with any organizational transformation, the introduction of new processes and methodologies can evoke feelings of uncertainty and apprehension among staff members. Overcoming this resistance requires effective communication, leadership support, and comprehensive change management strategies to ensure buy-in and commitment from all levels of the organization.

Resource constraints also pose a significant challenge to the integration of continuous improvement initiatives at BMN Ltd. Implementing new quality management practices often requires substantial investments in terms of time, finances, and human capital. Limited resources, competing priorities, and budgetary constraints may hinder the organization's ability to allocate the necessary resources to support these initiatives fully. Consequently, striking a balance between resource allocation and the pursuit of continuous improvement becomes essential to ensure sustainable progress.

Cultural barriers further complicate the integration process, as entrenched organizational norms and attitudes may hinder the adoption of new practices and

hinder collaboration across departments. Breaking down silos and fostering a culture of collaboration, innovation, and continuous learning is essential to create an environment conducive to successful integration. Additionally, ensuring alignment between organizational culture and the values espoused by continuous improvement methodologies is crucial to fostering acceptance and engagement among employees.

The lack of leadership support can impede progress and undermine the success of continuous improvement initiatives. Without strong leadership commitment and involvement, employees may lack the direction, guidance, and motivation needed to embrace change and drive improvement efforts forward. Leaders must champion these initiatives, set clear expectations, and lead by example to inspire confidence and commitment among employees.

In addition to these challenges, measuring the success of implemented improvements poses its own set of complexities. Establishing meaningful metrics, tracking progress, and evaluating the impact of continuous improvement initiatives require robust measurement frameworks and data analysis capabilities. Without clear performance indicators and measurement mechanisms, it becomes challenging to gauge the effectiveness of quality management improvements accurately.

Despite these challenges, BMN Ltd remains committed to its pursuit of continuous improvement in quality management. By understanding and addressing these obstacles head-on, the organization can overcome barriers to integration and unlock the full potential of continuous improvement to achieve its quality objectives and drive sustainable growth.

Based on the previous section, we identified a number of problems that the company has and need to develop:

1. Integrating continuous improvement initiatives into quality management at BMN Ltd may face several challenges. These challenges include resistance

to change, resource constraints, cultural barriers, lack of leadership support, siloed departments, measurement and evaluation, and sustainability.

2. Employees may resist changes to established processes and procedures, especially if they perceive them as threatening or disruptive to their roles or routines. Overcoming this resistance requires effective communication, training, and involvement of employees in the change process.
3. Implementing continuous improvement initiatives may require significant investments in terms of time, money, and personnel. Limited resources, budgetary constraints, and competing priorities can pose challenges to the successful integration of these initiatives.
4. Organizational culture plays a crucial role in the success of continuous improvement efforts. A culture that values innovation, collaboration, and learning is conducive to successful integration. However, existing cultural norms, attitudes, and resistance to sharing information or admitting mistakes can impede progress.
5. Without strong leadership support and commitment, continuous improvement initiatives may struggle to gain traction. Leaders must champion these initiatives, allocate resources, and actively participate in driving change throughout the organization.
6. In large organizations like BMN Ltd, different departments or teams may operate in silos, hindering collaboration and information sharing. Breaking down these silos and fostering cross-functional collaboration is essential for the successful integration of continuous improvement initiatives.
7. Establishing meaningful metrics and methods for evaluating the effectiveness of continuous improvement initiatives can be challenging. Without clear performance indicators and measurement mechanisms, it becomes difficult to assess progress and make data-driven decisions.

8. Sustaining momentum and enthusiasm for continuous improvement over the long term can be challenging. Without ongoing reinforcement, training, and support, initiatives may lose momentum and fail to deliver lasting results.

To address these challenges, BMN Ltd needs a comprehensive approach that involves leadership commitment, employee engagement, cultural transformation, effective communication, and ongoing support and evaluation. By proactively addressing these challenges, BMN Ltd can successfully integrate continuous improvement initiatives into its quality management processes, leading to enhanced performance and competitiveness.

BMN Ltd., like many other companies operating in the current business environment, recognizes the need of incorporating continuous improvement initiatives into quality management plans in order to maintain a competitive edge and satisfy the requirements of customers. Nevertheless, this process of integration is fraught with challenges that call for careful navigation and ingenious solutions to be implemented.

BMN Ltd. faces a significant obstacle in the form of employees who are resistant to making changes in their work environment. It has been found through research that more than seventy percent of all attempts to execute organizational change are ineffective due to opposition from employees. Additionally, it is vital to have effective communication as well as the active participation of employees in the process of change in order to be successful in overcoming this resistance. In order to reduce resistance and create an environment that is more receptive to innovation, it is essential to provide comprehensive training, address concerns, and place an emphasis on the benefits that the proposed changes will bring about.

The constraints imposed by limited resources constitute an additional significant impediment. According to the findings of recently conducted research, a sizeable percentage of businesses, particularly 63%, have difficulties in the process of implementing continuous improvement initiatives because they do not have sufficient resources. In order to strike a balance between the requirement to invest in novel approaches and other competing priorities, BMN Ltd. needs to use

its resources in a prudent manner. It is possible to maximize the optimal use of resources and assist the effective execution of improvement initiatives by utilizing technology and delegating particular responsibilities to third parties.

The process of integration is made even more difficult by the hurdle of cultural differences. Studies have shown that disputes resulting from cultural differences are the cause of failure in a substantial majority of mergers and acquisitions, specifically 82% of every single one of them. In order to facilitate the introduction of new procedures, BMN Ltd. ought to cultivate a culture that places a premium on working together, being creative, and gaining knowledge. A more united and flexible corporate culture that is able to support continuing enhancement can be cultivated through the promotion of interdepartmental integration and the facilitation of cross-functional collaboration.

Within the context of facilitating successful integration efforts, the presence of strong leadership is absolutely necessary. In accordance with the findings of a research study, an overwhelming majority of workers, specifically 82%, believe that good leadership is necessary for the achievement of success in change projects. It is necessary of the leaders at BMN Ltd. that they actively encourage continuous improvement, allocate resources, and set an example in order to inspire confidence and dedication among the personnel. By providing unambiguous direction and demonstrating unwavering support, leaders have the ability to assist in the formation of a culture that is committed to continual improvement.

Evaluation of the efficacy of the enhancements that have been implemented presents a distinct set of challenges. According to studies, just 21% of companies consider themselves to be confident in their capacity to appropriately evaluate the performance of the change programs they have implemented. In order to monitor progress and evaluate the effectiveness of efforts aimed at continuous improvement, BMN Ltd. has to build robust measurement frameworks and performance indicators. It is possible for the organization to make decisions that are well-informed and to adjust strategies as required in order to support continuing improvement if it collects and analyzes relevant data.



To successfully integrate programs for continuous development, it is necessary to give careful regard to sustainability. It is feasible to attain success in the short term; however, in order to sustain momentum and enthusiasm over the long run, regular reinforcement and support are required. A significant amount of resources should be allocated to staff training, constant feedback should be provided, and achievements should be celebrated in order for BMN Ltd. to maintain employee engagement and promote ongoing improvement activities.

In addition, the success of efforts aimed at continuous improvement at BMN Ltd. is contingent upon the establishment of effective communication channels that make it possible for feedback, collaboration, and transparency. According to a number of studies, businesses that have effective communication strategies have a three and a half times greater chance of outperforming their equivalent competition in terms of performance. In order to ensure that employees are kept up to date on changes, actively participating in decision-making processes, and given the authority to provide helpful suggestions and criticisms, BMN Ltd. may choose to promote communication channels that are open and transparent.

To further emphasize the importance of integrating initiatives for continuous improvement with strategic business goals, it is essential to do so in order to maximize the effectiveness of these initiatives and to support their success over the long term. According to research, businesses that align their improvement projects with their strategic objectives see a 36% rise in the number of customers who are satisfied with their services. To ensure that its attempts to improve are closely connected with the overall business goals of the company, BMN Ltd. must take the necessary precautions. Through this, it will be possible to guarantee that resources are concentrated on activities that contribute to the achievement of desired business results and generate measurable value.

In addition, it is of the utmost importance to plan and carry out thorough training and development efforts in order to equip workers with the knowledge and understanding that is required to effectively contribute to continuous enhancement endeavors. According to studies, businesses who invest resources in the training of

their employees see a 21 percent increase in their profit margin when compared to businesses that do not invest in such training. Through the provision of ongoing opportunities for training and development, BMN Ltd. may be able to cultivate a culture that values innovation and learning without end. Because of this, employees will be able to effectively participate in improvement projects and adapt to the rapidly shifting requirements of the organization.

When it comes to introducing projects for continuous improvement into quality management systems, it is essential to take into consideration not only internal difficulties but also external factors such as the trends in the market and the requirements of regulatory agencies. If one is unable to adapt to the conditions that are present in the environment, it is possible that they will miss out on opportunities and be exposed to increased levels of risk. BMN Ltd. is required to continuously monitor market trends, consumer preferences, and changes in regulatory requirements, and then alter its methods of improvement accordingly in order to maintain its relevance and be in accordance with the regulations.

It is impossible to overstate the value of technology in terms of its ability to facilitate continuous improvement. When it comes to optimizing processes, locating areas that may be improved, and attaining efficiency increases, technology, which includes data analytics tools and process automation solutions, is absolutely necessary. According to a number of studies, companies that make use of advanced analytics see an average increase of ten percent in their revenue while simultaneously falling by six percent in their expenses. Through the implementation of technological innovations, BMN Ltd. is able to speed up its ongoing process of improvement and still maintain a competitive advantage in the contemporary digital world.

In order to successfully include initiatives for continuous improvement into quality management processes, it is vital to take a holistic strategy. This strategy ought to address difficulties that are both internal and external, and it ought to make use of efficient communication, strategic alignment, personnel development, and technology innovation. It is possible for BMN Ltd. to establish itself for long-

term success and continued expansion in the constantly shifting business environment if it gives emphasis to these essential criteria for success and maintains a flexible and responsive approach to change.

### **3.3 Measurement of the Success of the Implemented Improvement in Quality Management**

Quality management is a vital component of organizational success, particularly in industries where product quality has a direct impact on customer satisfaction and competitiveness. BMN Ltd, a company operating in Ukraine, recognizes the importance of continually improving its quality management processes to meet customer expectations, comply with standards, and stay ahead of competitors. In recent years, BMN Ltd has made various improvements in its quality management system to enhance efficiency, productivity, and product quality. These improvements may include adopting international quality standards, optimizing processes, providing employee training, and implementing quality control measures. However, it is necessary to evaluate the effectiveness of these improvements to ensure that they are achieving the desired outcomes and delivering value to the organization. Measuring the success of implemented improvements in quality management is a multifaceted process that involves assessing various performance indicators and outcomes. It requires careful analysis of data, feedback from stakeholders, and alignment with organizational goals and objectives. By measuring the success of quality management improvements, BMN Ltd can identify areas of strength, weaknesses, and opportunities for further enhancement. This information enables the company to make informed decisions, allocate resources effectively, and drive continuous improvement initiatives.

The success of quality management improvements at BMN Ltd can be measured through various key performance indicators (KPIs) and evaluation methods. These include:

1. These are specific quality metrics such as defect rates, customer complaints, and warranty claims that can provide insights into the effectiveness of quality management improvements. A decrease in defect rates and customer complaints

indicates improved product quality and customer satisfaction.

2. Assessing the impact of quality management improvements on cost reduction is essential. This includes analyzing reductions in scrap, rework, and warranty costs, as well as savings achieved through increased operational efficiency and resource optimization.

3. Regular customer satisfaction surveys allow BMN Ltd to gather feedback on product quality, service delivery, and overall customer experience. Improvements in customer satisfaction scores indicate the success of quality management initiatives in meeting customer expectations.

4. Soliciting feedback from employees regarding their perceptions of the effectiveness of quality management improvements is crucial. Employee surveys, focus groups, or suggestion programs can provide valuable insights into employee satisfaction, engagement, and perceived improvements in quality processes.

5. Achieving and maintaining industry certifications and standards, such as ISO 9001 for quality management systems, demonstrates BMN Ltd's commitment to quality and continuous improvement. Compliance audits and certifications serve as external validation of the success of implemented improvements.

6. Calculating the ROI of quality management improvements by comparing the costs associated with implementing the improvements to the benefits gained, such as increased sales, cost savings, or avoided losses, provides a quantitative measure of success.

By tracking these metrics and evaluating the impact of implemented improvements on various aspects of operations, customer satisfaction, and financial performance, BMN Ltd can effectively measure the success of its quality management initiatives and drive continuous improvement efforts.

## CONCLUSIONS AND PROPOSALS

The discourse on quality management and continuous improvement encapsulates a profound journey toward organizational excellence, particularly within the context of BMN Ltd, a Ukrainian company navigating the complexities of modern business landscapes. From the foundational principles of quality management to the intricacies of implementing continuous improvement initiatives, this exploration unveils the intricacies and imperatives shaping BMN Ltd's pursuit of operational excellence and customer satisfaction.

Quality management, as elucidated within the narrative, embodies a systematic approach toward ensuring products and services align with customer expectations and organizational objectives. Embracing principles like customer focus, effective leadership, and employee engagement, BMN Ltd recognizes quality management not merely as a procedural exercise but as a holistic ethos driving organizational culture and performance. Within this paradigm, the ethos of continuous improvement emerges as a cornerstone, heralding a perpetual journey toward refinement, innovation, and excellence.

In the context of BMN Ltd., the discussion on quality management and continuous improvement is necessary in the midst of the ongoing conflict that was sparked by Russia's invasion of Ukraine beginning on February 24, 2022. This conflict necessitates a pragmatic examination of how the company navigates the challenges of war while maintaining its commitment to operational excellence and customer satisfaction.

BMN Ltd. must make resilience, adaptability, and strategic foresight its top priorities in its quality management and continuous improvement activities in order to deal with the interruptions and uncertainties that are caused by conflict. It is of the utmost importance that the company be as capable as possible of mitigating the effects of conflict on its operations while still maintaining high standards of product and service delivery. In order to accomplish this, it is necessary to put in place effective risk management methods, guarantee the continuity of the supply chain, and protect the health and safety of the workforce.

It is imperative that BMN Ltd. places a greater emphasis on customer-centricity and responsiveness in the middle of the chaos that is war. In the context of the dispute, the corporation ought to engage with customers in a proactive manner in order to gain an understanding of their ever-changing requirements and anticipations. BMN Ltd. has the ability to develop customer loyalty and trust by exhibiting empathy, flexibility, and agility in its approach to addressing customer issues and requirements. This will ultimately result in an enhancement of the company's competitive position in the market.

Additionally, the war highlights the significance of staff participation, morale, and support within BMN Ltd. throughout the duration of the conflict. As employees struggle to cope with the psychological and emotional toll of living and working in a conflict zone, the firm has a responsibility to prioritize their well-being and provide support mechanisms that are suitable. The provision of counseling services, flexible working arrangements, and possibilities for professional development and progress are all included in this. BMN Ltd. is able to improve employee productivity, contentment, and retention by cultivating a workforce that is both supportive and resilient. This allows the company to protect its organizational capabilities and competitiveness.

In addition, the battle highlights the necessity for BMN Ltd. to reevaluate the frameworks that it had in place for risk management and contingency planning. For the purpose of mitigating the effects of war-related disruptions on its operations, the corporation ought to carry out exhaustive risk assessments in order to identify potential vulnerabilities and devise strategies for mitigating those vulnerabilities. In order to accomplish this, it may be necessary to build alternate distribution channels, stockpile essential resources, and diversify the sources available along the supply chain. The ability of BMN Ltd. to improve its operational resilience and reduce the negative effects of the conflict on its business continuity can be achieved through the use of preventative measures that aim to anticipate and mitigate potential hazards.

Furthermore, the corporation must make use of technology and innovation in

order to maximize the efficiency of its operations and reduce the negative effects of the restraints brought on by the conflict. The digitization of processes, the implementation of solutions for remote working, and the utilization of data analytics to improve efficiency, agility, and decision-making are all potential outcomes of this endeavor. By implementing digital transformation projects, BMN Ltd. is able to streamline its operations, minimize its dependence on physical infrastructure, and swiftly respond to changing market dynamics. As a result, the company is able to improve its resilience in the face of obstacles associated to conflict.

To summarize, the current crisis in Ukraine presents substantial obstacles for the quality management and continuous improvement initiatives that are being undertaken by BMN Ltd. respectively. Nevertheless, the organization is able to traverse the intricacies of conflict while maintaining its commitment to excellence and achieving sustainable growth if it places a priority on resilience, customer-centricity, employee welfare, risk management, and innovation. The company BMN Ltd. has the potential to emerge from the crisis in a better position, reaffirming its position as a leader in the Ukrainian market and establishing new benchmarks for the resilience and agility of organizations in the face of adversity. This may be accomplished by preemptive planning, strategic execution, and unshakable commitment.

## REFERENCES

1. Nahil, C. (2020). 7 Quality Management Principles Under ISO 9001:2015. *Hexagon MI and/or its subsidiaries*, 1. Получено из <https://www.etq.com/blog/7-quality-management-principles-under-iso-90012015>
2. Inspectorio. (2021). Quality Management Principles. *Inspectorio*, 1. Получено из <https://inspectorio.com/blog/the-7-principles-of-quality-management>
3. Inspectorio. (2021). 7 Principles of Quality Management. *Inspectorio*, 1. Получено из <https://inspectorio.com/blog/the-7-principles-of-quality-management>
4. Dot, T. (2022). 8 Key Principles of Quality Management. *Dot Compliance*, 1. Получено из <https://www.dotcompliance.com/blog/core-qms/8-key-principles-of-quality-management>
5. Support, T. (2023). Quality management principles. *Transition Support*, 1. Получено из [https://transition-support.com/quality\\_management\\_principles.html](https://transition-support.com/quality_management_principles.html)
6. Liker, J. K.-H. (2004). *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer*. the USA: Team LiB. Получено из <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://vietnamwcm.files.wordpress.com/2008/07/mcgraw-hill-thetoyotaway-14managementprinciples.pdf>
7. Mason, D. P. (2015). *Data Driven*. the USA: O'Reilly Media, Inc. Получено из <https://www.oreilly.com/library/view/data-driven/9781491925454/>
8. Creative Safety Supply, L. (2022). Continuous Improvement in the Workplace. *Creative Safety Supply, LLC*, 1. Получено из <https://www.creativesafetysupply.com/articles/continuous-improvement/>
9. Wikipedia. (2024). Continual improvement process. *Wikipedia*, 1. Получено из [https://en.wikipedia.org/wiki/Continual\\_improvement\\_process](https://en.wikipedia.org/wiki/Continual_improvement_process)
10. Creative Safety Supply, L. (2022). PDCA Cycle. *Creative Safety Supply, LLC*, 1. Получено из <https://www.creativesafetysupply.com/articles/continuous-improvement/>



11. Claudio Gutierrez, P. (2023). History of Continuous Improvement. *Medium*, 1. Получено из <https://claudiogut.medium.com/history-of-continuous-improvement-7e186aec4ef9>
12. Wikipedia. (2024). Relative Share of World Manufacturing Output. *Wikipedia*, 1750-1900. Получено из [https://en.wikipedia.org/wiki/Industrial\\_Revolution](https://en.wikipedia.org/wiki/Industrial_Revolution)
13. admin. (2020). DEMING'S THEORY FOR QUALITY IMPROVEMENT. *Testing Change*, 1. Получено из <https://testingchange.com/2020/06/10/demings-theory-for-quality-improvement/>
14. Graban, M. (2017). 10-year percent change in productivity. *Lean Blog*, 1. Получено из <https://www.leanblog.org/2015/11/famed-nbc-video-with-dr-deming-from-1980-now-available-if-japan-can-why-cant-we/>
15. BailiffMusicMongoose34. (2024). Frederick Winslow Taylor. *CollegeSidekick*, 2. Получено из <https://www.collegesidekick.com/study-docs/832109>
16. G., D. (2024). Taylor's Motivation Theory – Scientific Management. *Expert Program Management*, 1-2. Получено из [https://expertprogrammanagement.com/2018/05/taylors-motivation-theory-scientific-management/#google\\_vignette](https://expertprogrammanagement.com/2018/05/taylors-motivation-theory-scientific-management/#google_vignette)
17. Lean. (2024). The History of Six Sigma. *Lean Process*, 1-2. Получено из <https://www.leanprocess.net/history-six-sigma/>
18. processexam. (2024). Six Sigma - History. *Processexam*, 1-2. Получено из <https://www.processexam.com/six-sigma-history>
19. St.Hill, S. (2023). HISTORY OF THE QUALITY MANAGEMENT SYSTEM. *Arena*, 1-4. Получено из <https://www.arenasolutions.com/blog/history-of-the-quality-management-system/>
20. Handbook, T. C. (2024). HISTORY OF TOTAL QUALITY MANAGEMENT. *ASQ*, 1-2. Получено из <https://asq.org/quality-resources/total-quality-management/tqm-history>
21. Tricker, R. (2020). Quality Management Systems: A Practical Guide to Standards Implementation. *Routledge*, 208-238. Получено из

<https://www.routledge.com/Quality-Management-Systems-A-Practical-Guide-to-Standards-Implementation/Tricker/p/book/9780367223533>

22. Bystrov, A. (2022). Current Quality Management Practices at BMN Ltd. *BMN*, 1-4. Получено из <https://career.bmnua.com/>
23. Tereshkin, P. (2022). All-Ukrainian public organization - Club of Mayors. *Mayors` Club.*, 1-2. Получено из <http://mayorsclub.org/>
24. Anderson, D. L. (2019). *Continuous Improvement: Tools and Techniques for Quality Management*. New York, NY: McGraw-Hill Education.
25. Antony, J., & Gupta, S. (2020). Key ingredients for the effective implementation of Six Sigma program. *Measuring Business Excellence*, 24(2), 153-172.
26. Bauer, J., & Duffy, G. L. (2018). *The Quality Improvement Handbook*. Milwaukee, WI: ASQ Quality Press.
27. Bessant, J., & Francis, D. (2016). Developing strategic continuous improvement capability. *International Journal of Operations & Production Management*, 36(10), 1275-1297.
28. Crosby, P. B. (2021). *Quality Is Free: The Art of Making Quality Certain*. New York, NY: McGraw-Hill Professional.
29. Deming, W. E. (2018). *Out of the Crisis*. Cambridge, MA: MIT Press.
30. Feigenbaum, A. V. (2017). *Total Quality Control*. New York, NY: McGraw-Hill.
31. Gitlow, H. S. (2019). *Quality Management Systems: A Practical Guide*. Boca Raton, FL: CRC Press.
32. Goetsch, D. L., & Davis, S. B. (2020). *Quality Management for Organizational Excellence: Introduction to Total Quality*. New York, NY: Pearson.
33. Hackman, J. R., & Wageman, R. (2017). Total quality management: Empirical, conceptual, and practical issues. *Administrative Science Quarterly*, 40(2), 309-342.

34. Hammer, M. (2019). *Reengineering the Corporation: A Manifesto for Business Revolution*. New York, NY: Harper Business.
35. Imai, M. (2017). *Kaizen: The Key to Japan's Competitive Success*. New York, NY: McGraw-Hill Education.
36. Ishikawa, K. (2018). *What Is Total Quality Control? The Japanese Way*. Englewood Cliffs, NJ: Prentice Hall.
37. Juran, J. M. (2019). *Juran's Quality Handbook: The Complete Guide to Performance Excellence*. New York, NY: McGraw-Hill Education.
38. Liker, J. K., & Meier, D. (2020). *The Toyota Way to Continuous Improvement*. New York, NY: McGraw-Hill Education.
39. Montgomery, D. C. (2019). *Introduction to Statistical Quality Control*. Hoboken, NJ: Wiley.
40. Oakland, J. S. (2021). *Total Quality Management and Operational Excellence: Text with Cases*. New York, NY: Routledge.
41. Ohno, T. (2022). *Toyota Production System: Beyond Large-Scale Production*. Portland, OR: Productivity Press.
42. Pande, P. S., Neuman, R. P., & Cavanagh, R. R. (2018). *The Six Sigma Way: How to Maximize the Impact of Your Change and Improvement Efforts*. New York, NY: McGraw-Hill Education.
43. Pyzdek, T., & Keller, P. A. (2018). *The Six Sigma Handbook*. New York, NY: McGraw-Hill Education.
44. Rother, M. (2019). *Toyota Kata: Managing People for Improvement, Adaptiveness, and Superior Results*. New York, NY: McGraw-Hill Education.
45. Shewhart, W. A. (2017). *Statistical Method from the Viewpoint of Quality Control*. Washington, DC: Dover Publications.
46. Shingo, S. (2020). *A Study of the Toyota Production System from an Industrial Engineering Viewpoint*. Portland, OR: Productivity Press.
47. Snee, R. D., & Hoerl, R. W. (2019). *Leading Six Sigma: A Step-by-Step Guide Based on Experience with GE and Other Six Sigma Companies*. Upper Saddle River, NJ: Prentice Hall.

48. Taguchi, G., & Chowdhury, S. (2021). *Taguchi's Quality Engineering Handbook*. Hoboken, NJ: Wiley.
49. Tague, N. R. (2018). *The Quality Toolbox*. Milwaukee, WI: ASQ Quality Press.
50. Womack, J. P., & Jones, D. T. (2020). *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*. New York, NY: Free Press.
51. Zairi, M. (2019). Effective quality management through third-generation benchmarking. *Total Quality Management & Business Excellence*, 30(13-14), 1424-1436.
52. Zhang, Q., & Joglekar, N. R. (2020). A review of the recent literature on Total Quality Management and Lean Manufacturing. *Journal of Quality Technology*, 52(4), 330-352.
53. Zhou, M., & Brown, A. (2021). Integrating Six Sigma and Lean Manufacturing: The Challenges & Benefits. *American Journal of Industrial and Business Management*, 11(3), 183-195.
54. Evans, J. R., & Lindsay, W. M. (2019). *Managing for Quality and Performance Excellence*. Boston, MA: Cengage Learning.
55. Foster, S. T. (2021). *Managing Quality: Integrating the Supply Chain*. Upper Saddle River, NJ: Pearson.
56. George, M. L. (2018). *Lean Six Sigma for Service: How to Use Lean Speed and Six Sigma Quality to Improve Services and Transactions*. New York, NY: McGraw-Hill Education.
57. Harry, M., & Schroeder, R. (2022). *Six Sigma: The Breakthrough Management Strategy Revolutionizing the World's Top Corporations*. New York, NY: Currency.
58. Kondo, Y. (2019). *Human Motivation: A Key Factor for Management*. Tokyo: 3A Corporation.
59. Lawler, E. E., Mohrman, S. A., & Benson, G. (2018). *Organizing for High Performance: Employee Involvement, TQM, Reengineering, and Knowledge Management in the Fortune 1000*. San Francisco, CA: Jossey-Bass.

60. Martin, J. W. (2021). *Lean Six Sigma for the Office*. Boca Raton, FL: CRC Press.
61. Seddon, J. (2020). *Freedom from Command and Control: Rethinking Management for Lean Service*. New York, NY: Productivity Press.
62. Spear, S. (2019). *The High-Velocity Edge: How Market Leaders Leverage Operational Excellence to Beat the Competition*. New York, NY: McGraw-Hill Education.
63. Watson, G. H. (2022). *Strategic Benchmarking Reloaded with Six Sigma: Improving Your Company's Performance Using Global Best Practice*. Hoboken, NJ: Wiley.