

Practical manual for the implementation of service and process improvement methodologies, quality models and tools

Manual práctico para la implantación de metodologías de mejora de servicios y procesos, modelos y herramientas de calidad

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ABSTRACT

This study seeks to identify the common factors in the methodologies, practices and management models, as well as in the quality tools used by leading national companies through a systematic review in which the city of Guayaquil was taken as a sample reference, investigating the achievement of procedures in institutions that have adopted this simplification model. It responds to a result of the research project carried out by students and teachers of the TES: Practical manual for the implementation of methodologies for the improvement of services and processes, models and quality tools. The authors used instruments such as interviews, SWOT analysis, Ishikawa diagrams, among others, to collect qualitative and quantitative data. The technique used was documentary review, using record cards as an instrument. The results obtained allow us to conclude that the authors' analysis highlights the need to apply specific strategies to improve organizational efficiency. They also seek to reflect the impact that quality management has had on the country's competitiveness. In addition, the importance of adopting proactive approaches to

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address the challenges identified in other studies is emphasized.

Keywords: Methodology, Improvement, Service, Organizational, Manuals

RESUMEN

Este estudio busca identificar los factores comunes en las metodologías, prácticas y modelos de gestión, así como en las herramientas de calidad utilizadas por empresas líderes a nivel nacional a través de una revisión sistemática en la que se tomó como referencia muestral la ciudad de Guayaquil, indagando sobre la consecución de procedimientos en instituciones que han adoptado este modelo de simplificación. Responde a un resultado del proyecto de investigación realizado por estudiantes y docentes del TES: Manual práctico para la implantación de metodologías de mejora de servicios y procesos, modelos y herramientas de calidad. Los autores utilizaron instrumentos como entrevistas, análisis DAFO, diagramas de Ishikawa, entre otros, para la recogida de datos cualitativos y cuantitativos. La técnica utilizada fue la revisión documental, utilizando como instrumento las fichas de registro. Los resultados obtenidos permiten concluir que el análisis de los autores destaca la necesidad de aplicar estrategias específicas para mejorar la eficiencia organizacional. También buscan reflejar el impacto que la gestión de la calidad ha tenido en la competitividad del país. Además, se destaca la importancia de adoptar enfoques proactivos para enfrentar los desafíos identificados en otros estudios.

Palabras clave: Metodología, Mejora, Servicio, Organizacional, Manuales

INTRODUCTION

Within an organization, the implementation of a manual not only establishes clear guidelines for improving processes and services, but also serves as a fundamental tool to delineate the responsibilities and roles of each team member. This meticulously crafted document seeks to standardize practices and procedures, providing a coherent structure

to guide the effective performance of employees and to empower and improve Ecuadorian companies.

In the Ecuadorian business context, the management of these roles and the manual itself can become a subject of controversy. Factors such as resistance to change, lack of clarity in internal communication and inconsistency in the application of policies can contribute to this situation, generating additional challenges in the effective implementation of established guidelines.

Domestic companies face operational efficiency issues such as production delays, high costs and process inefficiencies. As these companies find themselves in a difficult scenario, operational efficiency has become a primary concern. Production delays, high costs and process inefficiencies are recurring problems that hinder their ability to compete in an increasingly demanding and globalized market (Abril, C., et al., 2015). These delays not only affect companies' ability to meet market demand in a timely manner, but can also undermine their long-term profitability and sustainability.

Production delays and high costs are not only operational challenges, but also have a direct impact on customer satisfaction and company reputation. Today's consumers demand high-quality products and services, delivered quickly and efficiently. When a company cannot meet these expectations because of problems in its operations, it risks losing customers and damaging its brand image (Torres & Huidobro. 2024). In addition, high costs can reduce profit margins and affect the company's competitiveness in the marketplace, especially when it faces rivals that can offer lower prices due to greater operational efficiency.

In a dynamic and highly competitive business environment, addressing operational efficiency issues has become imperative for the survival and growth of domestic companies. Organizations must identify the underlying causes of production delays, high costs and process inefficiencies, and take effective measures to mitigate these challenges (Urruchi., & Dextre, 2023). This could involve adopting advanced technologies, overhauling work processes, improving supply chain management, and promoting an organizational culture geared toward efficiency and innovation. Ultimately, addressing these issues will not only benefit individual companies, but will also contribute to the economic growth and competitiveness of the country as a whole.

The objective of this study is to conduct a comprehensive analysis to identify common factors in management methodologies, practices and models, as well as in the quality tools used by leading companies. To achieve this purpose, several case studies previously conducted by other authors in this field will be examined in detail. These studies will provide a solid base of data and analysis that will allow the identification of trends, patterns and critical factors that influence the operational efficiency of national companies. Through this comparative analysis, we will seek to gain a deeper understanding of the challenges and opportunities faced by these companies in their quest for process optimization and cost reduction.

The development of this objective is relevant for several reasons. First, understanding operations efficiency is critical to the success and competitiveness of any company, especially in a dynamic and globalized business environment. By examining past case studies, successful practices and areas for improvement in the application of improvement methodologies and services can be identified, providing domestic companies with a practical and applicable framework for optimizing their processes and reducing costs.

The how of this objective lies in the analytical and comparative approach of the case studies. The use of rigorous research methodologies allows us to extract relevant data and critically evaluate the results obtained in each case. This in-depth analysis makes it possible to identify common patterns as well as significant differences between the companies studied, providing a global vision of the factors that influence the operational efficiency of national companies.

The ultimate goal of developing this objective is to contribute to the successful development and implementation of the Practical Manual for the Implementation of Improvement Methodologies and Services in national companies. By better understanding the dynamics of operational efficiency through the case studies, specific and practical recommendations can be generated to effectively optimize business processes and reduce costs (Barrera. Jr, J., 2020). This evidence-based approach ensures that the resulting manual is relevant, applicable and adaptable to the specific needs and realities of national companies, thus boosting their growth and competitiveness in the marketplace.

The fundamental purpose of the manual is to ensure that company personnel perform their activities efficiently and effectively (Del Peru, B., 2020). By providing clear guidelines and detailed procedures, the manual seeks to optimize the performance of personnel by guiding them in carrying out their tasks in an organized and systematic manner. In addition, by setting quality standards and providing guidance on best practices, the manual helps to ensure that activities are carried out consistently and with satisfactory results. Practical manuals from national companies

Within these manuals, according to Pizarro, V., & Álvarez, J. (2021), the planning phase involves defining objectives, strategies and methods for organizing and coordinating activities. During this phase, it is essential to clearly establish the organization's mission and vision, as well as to set concrete goals and develop processes to achieve them. In addition, it is necessary to design activities that can be carried out within a defined period of time.

According to González, S., et al. (2020), mentions that the implementation of the continuous improvement methodology has resulted in an increase in the return on investment through the application of various techniques. This increase is reflected in higher profits for the organization, which guarantees the satisfaction of investors or owners and contributes to the stability and success of the company in the long term. Service methodologies for a company.

The implementation of methodologies for design and the use of professional design services translates into an important variety of innovations that support the growth and continuity of companies in their respective territories (Barragán, L., & Sierra, M., 2021). This, in turn, boosts the social and economic development of countries by reducing trade gaps and balancing the trade balance. For years, foreign products have prevailed over local products, but these methodologies seek to change that dynamic.

According to Armendáriz, K. (2023), the Scrum methodology organizes the activities to be performed and the product requirements into a set of user stories. These stories allow an efficient management of the requirements and also define the tasks necessary to achieve the desired functionality. Each Sprint, in turn, represents a development stage that culminates in the delivery of a functional product.

As an additional feature to this theoretical framework, it is essential to mention some aspects of job performance, as cited by Paredes, P. (2021), he states that job performance refers to the level of execution shown by an employee in carrying out the responsibilities and tasks assigned in his job. This performance capacity not only demonstrates the aptitude and ability of the individual, but also has a direct impact on the team, contributing positively to the overall behavior of the organization.

According to Bustamante, R., et al (2022), it is crucial to consider that the work climate, being a determinant component of performance in MSMEs in Ecuador, is influenced by aspects such as communication, leadership, interpersonal relationships, motivation, participation and performance evaluation, among other factors. These elements have a direct impact on the configuration of the organizational climate within a company.

MATERIALS AND METHODS

The research process begins with the clear definition of the objective of the study, which is to conduct a systematic review as a type of research (Villasís, M. et al., 2020), which analyzes the practical manual for the implementation of improvement methodologies and services of national companies. The city of Guayaquil will be taken as a sample reference, investigating the achievement of procedures in institutions that have adopted this simplification model.

The various improvement and service methodologies employed by national companies, and some authors used tools such as staff interviews, SWOT matrix analysis and the Ishikawa diagram to collect data, which were of great use for the detailed analysis of the various national companies (Moya, E., 2021).

In order to carry out the systematic review, a qualitative and quantitative documentary research technique is used (Monsalve, E. et al, 2021). An exhaustive compilation of the selected theses is made, extracting relevant information related to the implementation of improvement methodologies and services in national companies, as well as the aspects dealt with in the respective practical manuals. During this process, documentary record cards are used as an instrument to organize and systematize the information collected from each of the theses reviewed.

Once all the relevant information has been compiled, we proceed to a critical and comparative analysis of the findings obtained. The methodologies used, the results obtained and the conclusions of each study are examined, identifying similarities, differences and emerging trends. This analysis allows obtaining a comprehensive and well-founded vision on the implementation of improvement methodologies and services in private companies, as well as the practices suggested in the respective practical manuals, thus providing a significant contribution to the body of knowledge in the field of business management.

RESULTS

In the research of Cueva, J. (2021), interviews, SWOT matrix analysis and the Ishikawa diagram were used to address the question about the proposal of a strategy to improve the performance and management of the company based on the area of work. The results indicated that it is suggested to strengthen the search for new clients and to develop a referral plan strategy among clients. In addition, the creation of learning and development programs, the reorganization and reconstruction of the warehouse, as well as the prioritization of customer requirements are proposed.

The results obtained from the study by Rudas, L., (2017), demonstrate with concrete data how the introduction of a Risk Management Model in a company dedicated to the execution of projects has a favorable effect, visible in palpable advantages such as cost reduction, quality assurance and timeliness in the execution of projects according to schedule.

The merger of management systems emerges as an outstanding tactic for any entity that aspires to improve its profitability and reliability of results. An important finding lies in the prevention of repetition of tasks, documentation and audits common to all three systems, resulting in significant cost reduction and time savings (Irurita, J. 2012).

According to Muñoz, F. (2018), in their study, 67% of respondents reported difficulties in collaborating with other areas, thus supporting the previously mentioned. On the other hand, 33% indicated not experiencing this type of problems. In a functional organizational structure such as the one currently adopted by the company, each department is assigned specific responsibilities; however, it is crucial that these functions operate in a joint and coordinated manner to achieve effective results, as advocated by process-based business management. Interviews with executives also revealed coordination challenges, particularly highlighting the lack of synchronization between the execution and purchasing areas.

The results obtained from the study conducted by Manchay, N. (2015), indicate the presence of superfluous activities in the production procedures, which results in the loss of time and, consequently, in economic losses for the company. They also point out the lack of training among team members regarding new products and the correct planning of their work. In response to this, it is proposed to improve the quality of processes by systematically identifying and subsequently eliminating problems and implementing

continuous improvements in procedures. This strategy is aimed at improving employee productivity and well-being, generating efficiency, effectiveness and productivity under quality standards.

According to the study conducted by Perez, R. (2011) on the design of a behavioral simulator for LEAN-based business management training, it points out that the integration of such a simulator should be consistently adjusted to the user's professional development plan, ensuring its relevance with respect to individual needs or the company's strategic objectives. Furthermore, it is suggested that the same platform could be adapted for use in various contexts simply by incorporating new projects and updating the database, giving the Lean Simulator significant versatility and effectiveness.

One of the authors stresses the need to implement learning and development programs for personnel, suggesting a focus on continuous growth and training as fundamental pillars for organizational improvement. The proposal to reorganize and rebuild the warehouse highlights the relevance of the physical infrastructure in the company's operational and logistical performance. Finally, the prioritization of customer requirements highlights the importance of focusing on customer needs and expectations as a key element for business success.

The detailed analysis of the data presented by Rudas, L., (2017), reveals the significant impact of implementing a Risk Management Model in an organization focused on project development. These concrete data offer a clear view of the tangible benefits obtained, which include a noticeable reduction in costs associated with projects, an increase in quality assurance of deliverables and an improvement in the ability to meet established deadlines.

These results not only support the effectiveness of the risk management model, but also underscore its critical relevance in improving overall organizational performance. The evidence provided reflects the importance of implementing proactive strategies to identify, assess and mitigate risks associated with projects, which can translate directly into greater success and operational efficiency in the development and execution of business projects.

Irurita, J. (2012) highlights the importance of integrating management systems as a key strategy to improve profitability and reliability of results in organizations. It highlights the main benefit of avoiding duplication of activities, documentation and audits between systems, which leads to significant cost reduction and time savings. This integration allows for greater operational efficiency by optimizing processes and available resources, which in turn contributes to improved competitiveness and overall organizational performance. It also suggests that the integration of management systems can be instrumental in achieving broader strategic objectives and fostering a more holistic approach to business management.

The research by Muñoz, F. (2018), reveals an important problem of coordination between areas within organizations. It is noted that 67% of respondents face difficulties in working collaboratively with other departments, which underlines the relevance of

interdepartmental coordination to achieve operational efficiency. This situation arises in the context of a functional structure where each area has specific roles, but must function in an integrated manner to achieve optimal results, according to the principles of process management. This analysis highlights the need to address communication and coordination barriers within organizations to improve their performance and achieve their strategic objectives.

The findings of the research conducted by Manchay, N. (2015), which evidence several challenges in the company's production processes. It highlights the existence of redundant activities that consume time and resources, resulting in economic losses. In addition, emphasis is placed on the lack of staff training in relation to new products and effective planning of their tasks. To address these shortcomings, a strategy focused on continuous process improvement is proposed, with a focus on the systematic identification and elimination of problems. It is emphasized that this improvement not only seeks to increase the company's productivity, but also to improve employee well-being. Ultimately, it emphasizes the importance of achieving efficiency, effectiveness and productivity within the organization, all under quality standards. This analysis suggests the need to implement concrete measures to optimize processes and strengthen the company's competitiveness in the market.

Perez, R. (2011) research on the design of a behavioral simulator for LEAN-based business management training. It highlights the importance of integrating the use of the simulator into the user's professional development plan, thus ensuring its relevance to individual needs or the organization's strategic objectives. In addition, it highlights the versatility of the simulator, which can be adapted for use in different contexts simply by incorporating new projects and updating the database. This analysis highlights the usefulness of the simulator as a flexible and powerful tool for business management training, capable of adapting to various situations and training needs.

Following this discussion, the question arises as to the real impact of the implementation of these methodologies on the improvement of the services offered by national companies, as well as their influence on competitiveness and sustainability in the long term. In addition, questions are raised about the challenges and obstacles that may arise during the implementation process, as well as the most effective strategies to overcome them. In this sense, new studies could investigate the perception and experience of companies that have adopted these methodologies, as well as the comparative analysis of companies that have successfully implemented them versus those that have faced difficulties. Also, emerging trends in improvement methodologies and services, and their adaptability to different industries and business contexts, could be explored in greater depth.

CONCLUSIONS

According to the results obtained from the analysis of the different authors, we can conclude that both authors present research that highlights the importance of implementing specific strategies to improve organizational performance and efficiency. Others highlight the effectiveness of a Risk Management Model in the context of business projects, showing significant reductions in costs, improvements in quality and compliance with deadlines. On the other hand, the integration of management systems is also emphasized as a key strategy to improve profitability and reliability of results, highlighting operational efficiency and improved competitiveness as key results.

Other studies highlight the importance of implementing proactive approaches to address the challenges identified. Risk management is proposed as an effective tool to identify and mitigate potential problems in projects, which translates into greater success and efficiency in their execution. On the other hand, the integration of management systems is highlighted as a way to optimize processes and resources, which contributes to improve the competitiveness and overall performance of the organization.

Both studies emphasize the importance of implementing specific strategies to address the organizational challenges identified, whether in project management or process optimization. These studies provide valuable insights to improve business performance and highlight the need to tailor approaches according to the needs and characteristics of each organization.

Finally, the exhaustive analysis of efficiency in the operations of national companies, with a particular focus on aspects related to production and costs, represents a crucial objective for evaluating and improving the competitiveness and sustainability of these organizations in today's market. Through a detailed examination of production processes, we seek to identify areas of opportunity to optimize resource utilization, reduce waste and improve product quality. The effectiveness of this analysis depends largely on the availability and quality of the data collected, as well as the ability of companies to interpret and act on the findings. In many cases, national companies face challenges in collecting accurate data and implementing effective corrective actions due to resource and technical capacity constraints.

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