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The Role of Performance Indicators in Operational Excellence: A Study of NEOM Projects in Saudi Arabia

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Sincerely,

Shahla'a

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Chapter 1: Introduction

- Introduction

Establishing an effective performance management system is essential to enable the organization to monitor its progress in achieving its vision and strategic objectives. Developing a balanced set of objective indicators is a basic requirement for establishing the principle of accountability and establishing a performance-based culture.

In the context of NEOM projects in Saudi Arabia, achieving operational excellence is crucial for fostering sustainable development and economic growth. Operational excellence entails optimizing processes, resources, and service delivery to meet the ambitious goals of the NEOM project. Performance indicators serve as essential tools for monitoring and guiding organizational performance toward operational excellence. However, understanding the relationship between performance indicators and operational excellence within the unique context of NEOM projects is essential for their successful implementation and achievement of strategic objectives.

- Problem Statement

Despite the significance of performance indicators in guiding organizational performance, their effectiveness in driving operational excellence within NEOM projects remains understudied. The specific mechanisms through which performance indicators contribute to operational excellence in this context are not fully understood. This

research seeks to address this gap by examining the role of performance indicators in facilitating operational excellence within NEOM projects and identifying factors that influence their effectiveness.

Study Purposes

This research aims to:

1. Investigate the relationship between performance indicators and key dimensions of operational excellence in NEOM projects.
2. Identify factors influencing the selection, implementation, and utilization of performance indicators in NEOM projects.
3. Explore best practices and success factors associated with the strategic use of performance indicators to drive operational excellence in NEOM projects.
4. Provide practical insights and recommendations for enhancing operational performance within NEOM projects through effective use of performance indicators.

- Study Questions

- 1/ Is there a relationship between performance indicators and the main dimensions of operational excellence in NEOM projects?
- 2/ What are the factors affecting the selection, implementation, and use of performance indicators in NEOM projects?
- 3/ What are the best practices and success factors associated with the strategic use of performance indicators to drive operational excellence in NEOM projects?
- 4/ What are the practical visions and recommendations to enhance operational performance within NEOM projects through the effective use of performance indicators?

Research Hypotheses

1. H1: There is a positive relationship between the use of performance indicators and operational performance within NEOM projects.
2. H2: Effective utilization of performance indicators enhances operational excellence in NEOM projects.
3. H3: The alignment between performance indicators and strategic goals significantly influences the effectiveness of performance measurement systems within NEOM projects.

- Theoretical Model

- Understand the importance of operational excellence.
- Basic concepts and components.
- The role of leadership in driving operational excellence.
- Building a culture of continuous improvement.
- Aligning operations with business strategy.
- Invest in technology and automation to achieve operational efficiency.
- Developing effective performance measurement systems.
- Empowering employees for operational excellence.

Chapter 2: Literature review

Introduction

Performance indicators play a vital role in achieving operational excellence for companies, as they contribute to measuring and evaluating the performance of operations and identifying strong and weak points. Performance indicators help measure the performance of operations objectively and determine the extent to which specific goals are achieved. Performance indicators provide valuable data that helps analyze operations and identify areas, that need improvement. By following performance indicators, companies can identify gaps and improve processes to increase efficiency and quality. Performance indicators serve as a tool for making strategic decisions, as they provide the data necessary to make the right decisions. Performance indicators help monitor long-term performance and ensure continuity of improvement. and operational excellence.

Variables:

- **Independent variable:** Performance indicators.
- **Dependent variable:** Operational excellence.

- Summary of Past studies

Previous research by Kaplan and Norton (1996), Bititci et al. (1997), and Neely et al. (2005) has emphasized the importance of performance indicators in guiding organizational performance. However, limited research has

specifically explored the role of performance indicators in operational excellence within the context of NEOM projects in Saudi Arabia.

- Theoretical Framework of the Study

Operational excellence is a key goal for organizations seeking to maximize efficiency, minimize costs, and deliver superior products and services to their customers. In today's fast-paced and competitive business environment, companies that can improve their operations are better positioned to succeed and prosper.

Understand the importance of operational excellence

Operational excellence is the relentless pursuit of continuous improvement in every aspect of an organization's operations. It involves streamlining processes, minimizing waste, and maximizing efficiency to deliver quality products and services to customers. The benefits of operational excellence are numerous, including cost savings, improved customer satisfaction, enhanced employee morale, and increased market competitiveness.

Basic concepts and components

Operational excellence includes a set of core concepts and components that are essential for organizations to achieve their operational goals, these include:

a. Process Improvement: Process improvement is at the heart of operational excellence. It includes identifying and eliminating bottlenecks, reducing waste, and improving overall efficiency. Organizations can use different methodologies such as Lean Six Sigma, Kaizen, or business process reengineering to improve their operations.

B. Quality Management: Ensuring high-quality products and services is critical to achieving operational excellence. Organizations need to establish strong quality management systems to monitor and improve the quality of products and services across the value chain.

C. Supply Chain Management: An efficient and well-managed supply chain is essential to operational excellence. Organizations need to have effective supplier management, inventory, logistics and distribution processes in place to ensure timely delivery of products and services.

Performance Measurement: Measuring and monitoring performance is critical to achieving operational excellence. Organizations need to create key performance indicators (KPIs) and implement performance measurement systems to track progress and identify areas for improvement.

3. The role of leadership in driving operational excellence

Leadership plays a pivotal role in driving operational excellence within the organization. Leaders need to establish a clear vision and strategy for operational excellence and ensure it is communicated effectively throughout the organization, they also need to lead by example and foster a culture of continuous improvement and accountability.

To achieve operational excellence, leaders must:

- a. Define and communicate a clear vision for operational excellence.
- B. Setting performance goals and expectations.
- C. Promoting a culture of continuous improvement and innovation.
- D. Provide resources and support for process improvement initiatives.
- H. Recognize and reward employees for their contributions to operational excellence.

4. Building a culture of continuous improvement

A culture of continuous improvement is essential for organizations to achieve operational excellence. This includes creating an environment in which employees are encouraged to identify and implement process improvements on an ongoing basis. Organizations can foster a culture of continuous improvement by:

- a. Providing training and development opportunities for employees to enhance their skills and knowledge.

- B. Create cross-functional teams to lead process improvement initiatives.
- C. Encourage open communication and collaboration between employees at all levels of the organization.
- D. Recognize and reward employees for their contributions to process improvement.
- H. Create a safe and supportive environment where employees feel able to take risks and propose innovative ideas.

Aligning operations with business strategy

For operational excellence to be truly effective, it must be aligned with the organization's overall business strategy, and this includes ensuring that operational goals and objectives are directly linked to the organization's strategic goals. To align operations with business strategy, organizations can:

- a. Conduct a comprehensive analysis of the business strategy and determine the operational priorities that support it.
- B. Develop a clear roadmap and action plan to achieve operational excellence.
- C. Ensure that key business processes are aligned with the organization's strategic objectives.
- D. Regularly review and update the operational strategy to ensure continued compatibility with the changing business environment.

Implement Lean Six Sigma methodologies to achieve operational excellence.

Lean Six Sigma is a powerful methodology that organizations can use to achieve operational excellence. It combines the principles of lean manufacturing, which focuses on eliminating waste and improving efficiency, with the statistical tools and techniques of Six Sigma, which aims to reduce variability and defects in processes.

To implement Lean Six Sigma to achieve operational excellence, organizations can:

- a. Identify and prioritize process improvement opportunities using Lean tools such as Value Stream Mapping, 5S and Kanban.

- B. Measure and analyze process performance using statistical tools and techniques.
- C. Implement process improvements and monitor their impact on key performance metrics.
- D. Control and sustain improvements by creating robust systems and processes.

Invest in technology and automation to achieve operational efficiency

Technology and automation play a critical role in enhancing operational efficiency and excellence. By leveraging technology, organizations can streamline operations, reduce manual work, and improve overall productivity. To invest in technology and automation to achieve operational efficiency, organizations can:

- a. Identify areas where technology can be used to automate manual tasks and improve efficiency.
- B. Conduct cost-benefit analysis to evaluate return on investment in technology and automation solutions.
- C. Implement technical solutions that align with the organization's operational goals and objectives.
- D. Provide training and support to employees to ensure smooth adoption and use of technology.

Developing effective performance measurement systems

Performance measurement is critical to achieving operational excellence because it allows organizations to track progress, identify areas for improvement, and make data-driven decisions. To develop effective performance measurement systems, organizations can:

- a. Define key performance indicators (KPIs) that are aligned with operational goals and objectives.
- B. Implement systems and processes to collect and analyze relevant data.
- C. Regularly review and monitor performance against defined KPIs.
- D. Use performance data to identify trends, patterns, and areas for improvement.
- E. Communicating performance results to employees and stakeholders to enhance accountability and transparency.

Empowering employees for operational excellence

Empowering employees is critical to achieving operational excellence. When employees are empowered, they are more likely to take ownership of their work, identify process improvements, and contribute to the overall success of the organization. To enable employees to achieve operational excellence, organizations can:

- A. Providing training and development opportunities to enhance employees' skills and knowledge.
- B. Encourage and reward employee participation in process improvement initiatives.
- C. Foster a culture of open communication and collaboration where employees feel comfortable sharing ideas and suggestions.
- D. Delegate decision-making authority to front-line staff to encourage ownership and accountability.
- H. Recognize and reward employees for their contributions to operational excellence.

Chapter 3: Research Methodology

- Introduction

This research will adopt a mixed-methods approach, combining quantitative analysis of survey data with qualitative inquiry through interviews or case studies. The survey will be administered to stakeholders involved in NEOM projects, while qualitative data will be collected through interviews with project managers and key personnel. Data analysis will involve statistical techniques such as correlation analysis and regression modeling, supplemented by thematic analysis of qualitative data.

- Research Design

The research will be structured into sections, including an introduction, literature review and previous studies, research methodology, findings and analysis, discussion, conclusions, and recommendations. Each section will be meticulously crafted to address specific research objectives and contribute to a comprehensive understanding of the role of performance indicators in operational excellence within NEOM projects.

- Population of the study:

The research community consists of employees working in companies operating in the NEOM project in the Kingdom of Saudi Arabia

- Sample Characteristic:

The research sample was from a group of employees who are dealing with KPIs in companies operating in the NEOM project in the Kingdom of Saudi Arabia, and their ages were over thirty.

- Sample Size Determination:

The research sample consists of 24 company employees working on the NEOM project.

- Data Collections procedures:

An electronic questionnaire was distributed to employees working in companies operating in the NEOM project in the Kingdom of Saudi Arabia.

- Method of Analysis

The electronic questionnaire was used to collect opinions about The Role of Performance Indicators in Operational Excellence: A Study of NEOM Projects in Saudi Arabia.

The data will be analyzed using percentages to identify the results of the answers contained in the questionnaire.

Chapter 4: Practical Study

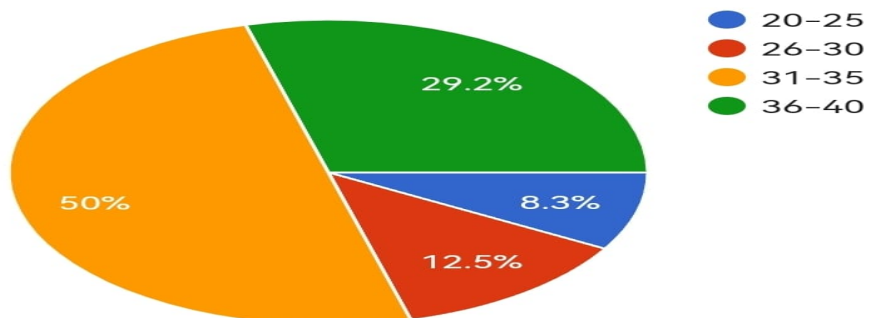
- Research Findings:

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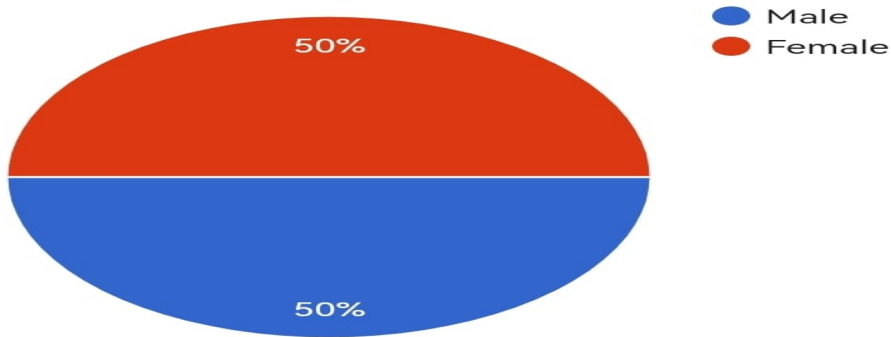


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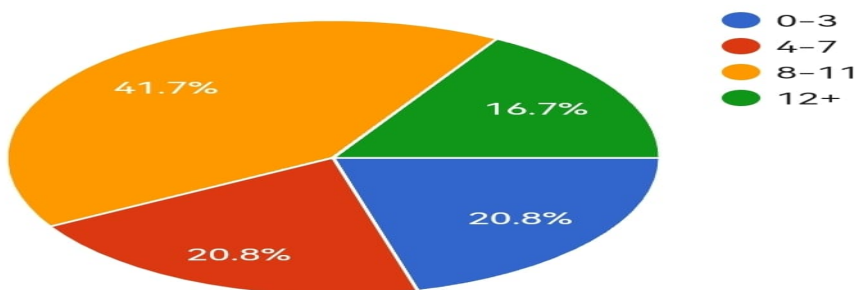
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The results of the questionnaire showed that most of the research sample was between the ages of 31 and 35 years, and this indicates that the sample was from the young group that had work experience to some extent.

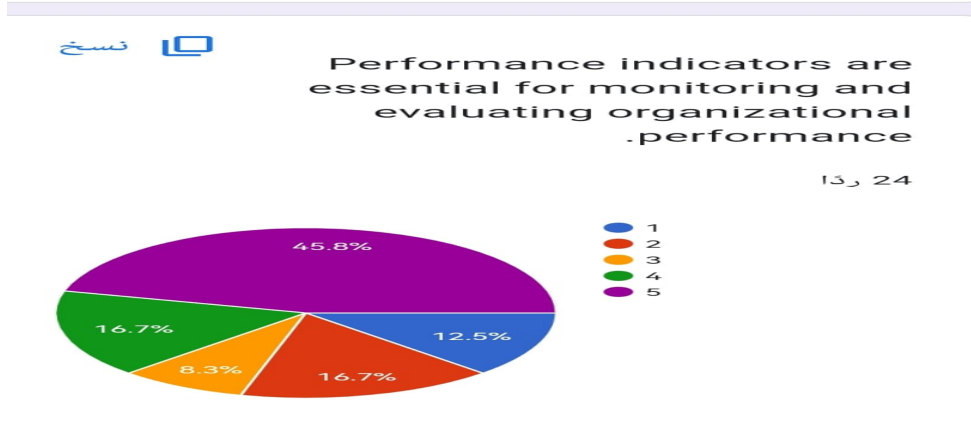


The results of the questionnaire showed that there was equality among the research sample in terms of gender, as the percentage was completely equal between males and females.



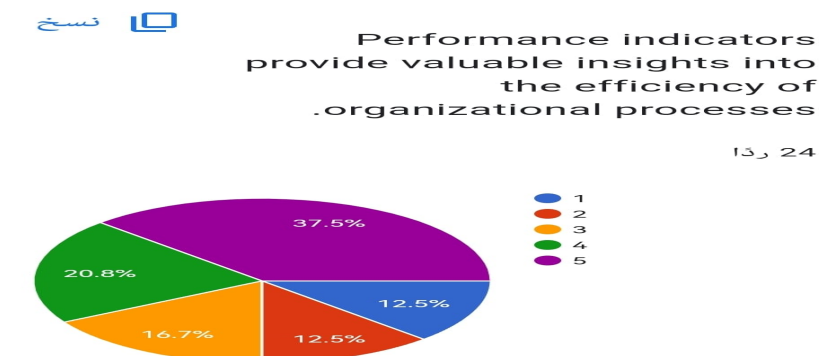
The results of the questionnaire showed that there is a large percentage of the research sample that has more than eight years of experience, which represents more than 60% of the research sample, and this indicates the great experience that the research sample possesses in the field of work.

Section 1: Perception of Performance Indicators



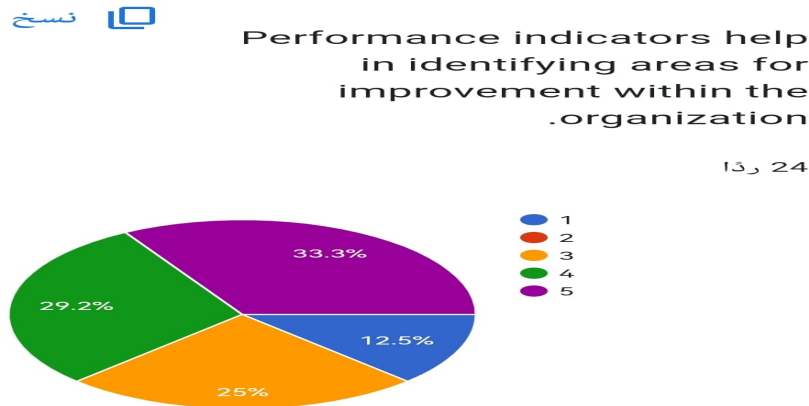
Section 1: Perception of Performance Indicators:

The results of the questionnaire on the question (Performance indicators are essential for monitoring and evaluating organizational performance) were that about 45% strongly agreed that performance indicators are necessary to monitor and evaluate organizational performance. This indicates the organizational awareness of the workers in the NEOM project of the importance of performance indicators in evaluating organizational performance.



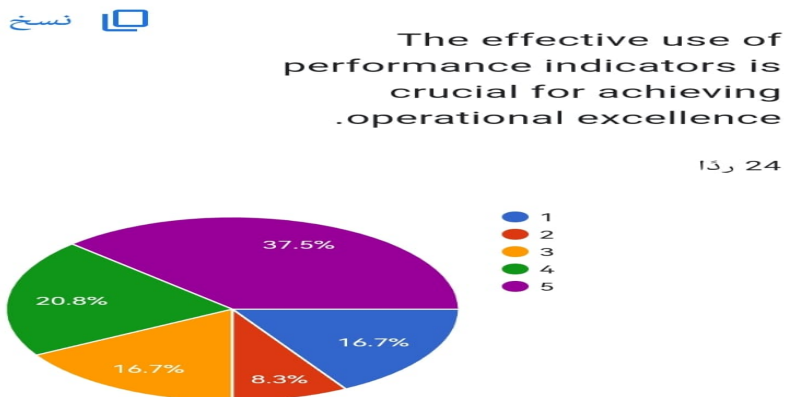
The results of the questionnaire on the question (Performance indicators provide valuable insights into the efficiency of organizational processes.) were about 58% strongly agreeing and agreeing that performance indicators provide valuable insights into the efficiency of organizational processes. This indicates the conviction of the workers

in the NEOM project in the role of performance indicators in forming A perception of the different competencies in the organizational process.



The results of the questionnaire on the question (Performance indicators help in identifying areas for improvement within the organization) were about 63% strongly agree and agree, and this indicates awareness of the role of performance indicators in identifying areas of improvement within the organization.

Section 2: Relationship between Performance Indicators and Operational Excellence

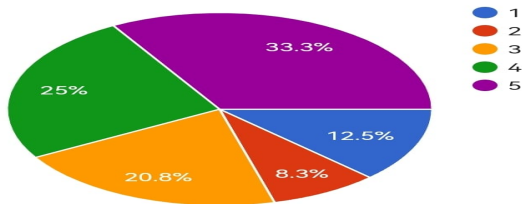


The results of the questionnaire on the question (The effective use of performance indicators is crucial for achieving operational excellence) were about 85% agree and strongly agree, and this indicates that the research sample realizes that the effective use of performance indicators is crucial to achieving operational excellence.



Organizations that utilize performance indicators strategically are more likely to attain operational excellence.

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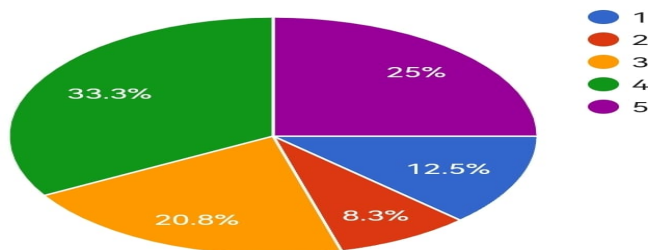


The results of the questionnaire on the question (Organizations that utilize performance indicators strategically are more likely to attain operational excellence) were about 58%, agree to strongly agree, and this indicates awareness that organizations that use performance indicators strategically are more likely to achieve operational excellence.

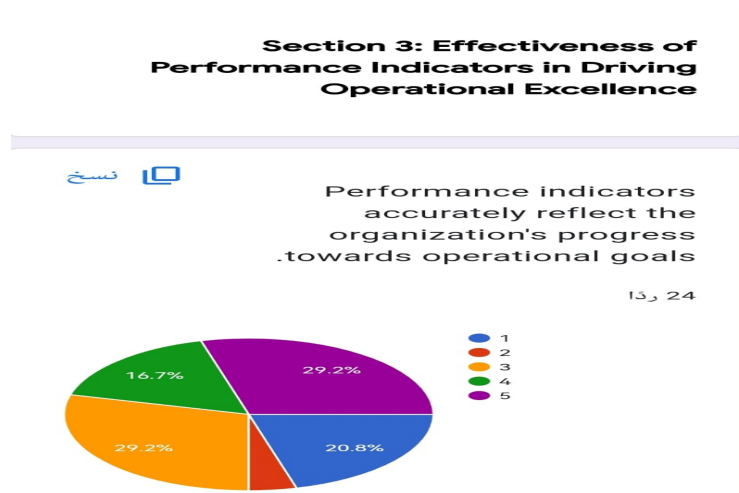


Performance indicators facilitate continuous improvement initiatives within the organization.

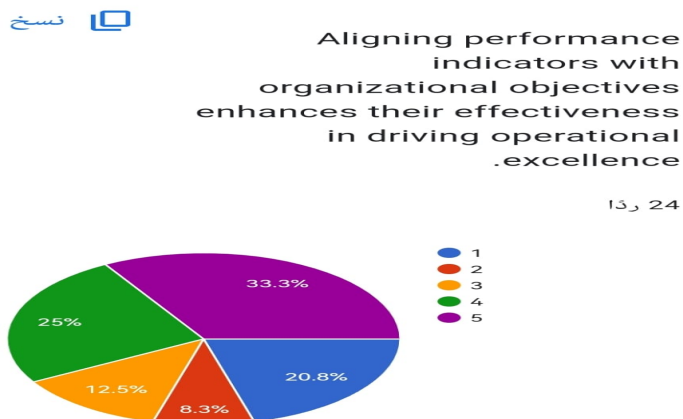
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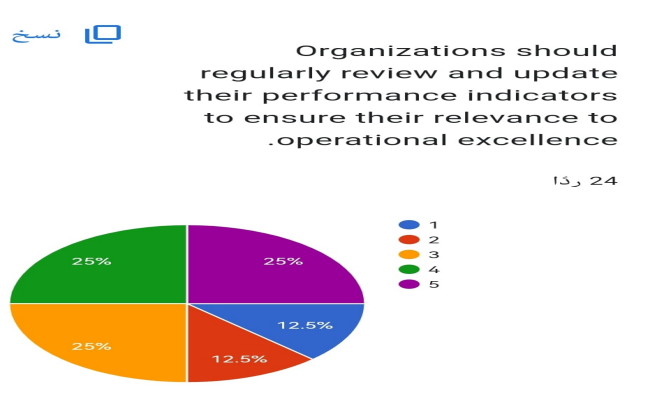
The results of the questionnaire on the question (Performance indicators facilitate continuous improvement initiatives within the organization) were about 58% strongly agree and agree, and this indicates awareness that performance indicators work to facilitate continuous improvement initiatives within the organization.



The results of the questionnaire on the question (Performance indicators accurately reflect the organization's progress towards operational goals) were about 46% agreeing to strongly agreeing, and this indicates the average percentage that agrees that performance indicators accurately reflect the organization's progress towards operational goals, as it indicates that there are other factors that influence on these indicators.



The results of the questionnaire on the question (Aligning performance indicators with organizational objectives enhances their effectiveness in driving operational excellence) were about 58% agreement to strongly agree, and this indicates the sample's awareness that aligning performance indicators with organizational objectives enhances their effectiveness in achieving operational excellence.



The results of the questionnaire on the question (Organizations should regularly review and update their performance indicators to ensure their relevance to operational excellence) were about 50% in agreement, and this indicates that the sample believes that organizations should review and update their performance indicators regularly to ensure their suitability to operational excellence.

Section 4: Additional Comments

Please provide any additional comments or insights you have regarding the role of performance indicators in operational excellence

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Performance indicators are key to successful operational excellence

It should to have good communications if you utilize performance indicators to achieve objectives

In the fourth section, the sample presented a set of visions and recommendations, which are:

1/ Performance indicators are key to successful operational excellence

2/ It should to have good communications if you utilize performance indicators to achieve objectives

This indicates the sample's awareness and agreement that there is a close relationship between successful operational excellence and performance indicators.

Also, emphasizing the role that communications plays in achieving goals when using performance indicators.

Recommendations

1/ Promoting a culture of transparency within the NEOM project to ensure that efforts are directed towards achieving clearly defined goals.

2/ Ensure that performance indicators are directly linked to the project's strategic objectives to ensure the correct direction.

3/ Providing training and development programs for work teams on how to understand and use performance indicators effectively.

4/ Use graphic analysis and artificial intelligence techniques to extract valuable insights from performance indicator data.

5/ Encouraging cooperation between departments and teams within the NEOM project to improve interaction and achieve goals jointly.

6/ Encouraging innovation and continuous development in the use of performance indicators to improve operations and achieve excellence.

7/ Ensure that specific and clear goals are set for the NEOM project and transform them into performance indicators that can be measured accurately.

8/ Applying graphic analysis and artificial intelligence techniques to better understand data and extract valuable insights.

9/ Providing training courses and development programs for teams to increase awareness of the importance of performance indicators and how to use them effectively.

10/ Encouraging innovation in the process of identifying and developing performance indicators to ensure they are consistent with the project's aspirations.

11/ Regularly review and evaluate performance indicators to ensure continued achievement of goals and continuous improvement.

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Arabic abstract

هدفت الدراسة الى التعرف على دور مؤشرات الأداء في التميز التشغيلي بالدراسة على مشاريع نيوم في المملكة العربية السعودية ، وكانت عينة الدراسة من الموظفين العاملين بالشركات في مشروع نيوم ، وتم استخدام الاستبيان لجمع البيانات ، وتم تحليل نتائج الاستبيان عن طريق التكرارات المتوية لنتائج الاجابات على الاستبيان ، وتوصلت الدراسة الى ان مؤشرات الأداء ضرورية لرصد وتقييم الأداء التنظيمي ، كما توفر مؤشرات الأداء رؤى قيمة حول كفاءة العمليات التنظيمية، وإشارات نتج الدراسة ايضا الى ان مؤشرات الأداء تساعد في تحديد مجالات التحسين داخل المنظمة وان الاستخدام الفعال لمؤشرات الأداء أمر بالغ الأهمية لتحقيق التميز التشغيلي، وان المنظمات التي تستخدم مؤشرات الأداء بشكل استراتيجي هي أكثر عرضة لتحقيق التميز التشغيلي وان مؤشرات الأداء تعمل على تسهيل مبادرات التحسين المستمر داخل المنظمة، كما أكدت النتائج على ان مواءمة مؤشرات الأداء مع الأهداف التنظيمية يعزز فعاليتها في تحقيق التميز التشغيلي، وان يجب على المنظمات مراجعة مؤشرات الأداء الخاصة بها وتحديثها بانتظام للتأكد من ملاءمتها للتميز التشغيلي ، وأوصت الدراسة بضرورة تفعيل مؤشرات الاداء في مشروع نيوم من اجل تحقيق لتمييز في الاداء التشغيلي .

- English abstract

The study aimed to identify the role of performance indicators in operational excellence by studying NEOM projects in the Kingdom of Saudi Arabia. The sample of the study was employees working in companies in the NEOM project. The questionnaire was used to collect data, and the results of the questionnaire were analyzed

through the percentage frequencies of the results of the answers to the questionnaire. The study concluded that performance indicators are necessary to monitor and evaluate organizational performance. Performance indicators also provide valuable insights into the efficiency of organizational processes. The results of the study also indicate that performance indicators help identify areas of improvement within the organization and that the effective use of performance indicators is crucial to achieving operational excellence. Organizations that use performance indicators strategically are more likely to achieve operational excellence and that performance indicators work to facilitate continuous improvement initiatives within the organization. The results also confirmed that aligning performance indicators with organizational goals enhances their effectiveness in achieving operational excellence, and that organizations must review indicators performance indicators and updating them regularly to ensure their suitability for operational excellence. The study recommended the necessity of activating performance indicators in the NEOM project to achieve excellence in operational performance.

دور مؤشرات الأداء في التميز التشغيلي: دراسة لمشاريع نيوم في المملكة العربية السعودية

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