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Original Research Article

The Impact of Change Management on Enhancing Performance Efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh

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Abstract

The study aims to investigate the impact of change management on enhancing performance efficiency at Prince Mohammed bin Abdulaziz Hospital in Riyadh. To achieve this goal, the researchers opted for the descriptive approach. the study sample consisted of (150) from the study items (Administrative, Doctor, Nurse and Technician) at Prince Mohammed bin Abdulaziz Hospital in Riyadh. The study utilized a questionnaire as a research tool for data collection, and in light of that, the study arrived at several results, with the most significant being the study on the impact of change management on enhancing performance efficiency at Prince Mohammed bin Abdulaziz Hospital in Riyadh. The findings indicate a significant positive correlation between effective change management strategies (Cultural, Technological, Structural, and Human Dimension) and enhancing performance efficiency within the organization. These outcomes collectively contribute to a heightened level of performance and productivity. As organizations navigate an increasingly dynamic business environment, the importance of embracing change management practices becomes evident in sustaining and enhancing operational effectiveness. The study recommends the following in light of the results The necessity of thorough and well-planned change management through the development of long-term strategic plans, along with the presence of short-term goals. The importance of ensuring that organizational structural changes align with the internal work requirements within the hospital, following careful study of both internal and external environmental change requirements. Working on automating systems within the government sector and developing technology for use within the hospital to enhance quality of healthcare services provided by the hospital.

Keywords: Change Management, Performance Efficiency, Prince Mohammed bin Abdulaziz Hospital.

INTRODUCTION

Given the global technological and knowledge advancements in various fields, as well as the ongoing information communication revolution, which has

gradually affected all administrative and operational aspects across various sectors, including the healthcare sector, the need for change to keep pace with modern developments and address the challenges arising from these rapid advancements has become imperative.

Change is seen as a significant gap in existing behavioral patterns and expectations within the organizational environment. Conversely, change management is viewed as a structured approach to dealing with change, whether from an organizational or individual perspective. In today's rapidly evolving and increasingly complex world, change has become an indispensable necessity (Wachira & Anyieni, 2015).

Organizational change serves as the tool organizations use to address issues such as bureaucracy, stagnation, and dissatisfaction with the expected performance. It isn't about abrupt changes that occur due to specific situations, be they social, economic, or political in nature. Instead, it involves the deliberate management of planned changes initiated intentionally by officials and development experts who recognize a gap between the desired and actual performance. This process seeks to explore alternative solutions that can enhance and elevate performance (Zeeshan& *et al.*, 2015).

Change represents a systematic process that an organization undergoes, whether it is intentional or results from unforeseen circumstances, within a specific timeframe with the aim of enhancing and advancing the organization's role and elevating it to a higher level. Given the necessity of change, it must be carefully managed, and this is where change management comes into play. Administrative leaders prepare a detailed plan for implementing this change within a specified timeframe. This plan is executed with great care, excellent coordination, and precise organization to ensure the achievement of the desired objectives of the change. This is accomplished by making sound and scientific use of the available human resources, material resources, and technological capabilities within the organization, regardless of their type (Abu Shareef and Al-Louh, 2016).

Given the significance of change management, many hospitals embrace the concept of transformative change as they strive for sustainable improvements and work to enhance their performance efficiency. The critical factor for success in achieving performance improvements and efficiency enhancements lies in the willingness and ability to manage change effectively. Organizations that successfully manage change are more likely to achieve long-term sustainable success. By adopting proven tactics and principles of change management, hospitals can navigate the complex and evolving healthcare landscape, achieve desired outcomes, and prepare to face future challenges and opportunities, thus enhancing their performance efficiency in delivering healthcare services (Calderone, 2023).

Performance efficiency is a significant criterion for evaluating the performance quality of any organization. It holds particular importance for hospitals, as they are tasked with providing high-quality healthcare services to maintain the health of the community. Healthcare services are characterized by their relatively high costs because providing good healthcare or healthcare services to the community is one of the major challenges faced by hospital and healthcare center administrators. This is due to the direct impact of these services on the health and lives of individuals, and their relatively high costs do not align with the rapid changes at all levels. Moreover, there is an increasing demand for higher efficiency in hospital service delivery by citizens. This necessitates hospital administrators to implement change management in healthcare institutions to address this need, respond to citizens' demands, and enhance hospital performance efficiency (Hajji *et al.*, 2015).

Change is a necessary and inevitable process for every institution, especially for healthcare organizations. It reflects the reality of human civilization's development. The process of change in all its aspects and stages fundamentally depends on the presence of essential conditions to achieve the desired objectives. Change has become a necessity to ensure the continuous improvement and development of hospitals' performance and the provision of excellent healthcare services. It is in line with their existence and human goals, aiming to satisfy their customers and ensure that. To achieve this, hospitals should include change management, given its role in enhancing their performance efficiency and service quality (Sharif, 2018). Hence, the importance of studying the impact of change management on enhancing the performance efficiency at Prince Mohammed bin Abdulaziz Hospital in Riyadh.

Problem of the Study

Hospitals, like other institutions in a rapidly changing environment, face numerous challenges. To address these challenges, healthcare organizations and hospitals must establish specialized creative management of administrative processes capable of adapting to ongoing changes and aligning with economic, environmental, health, social, and cultural developments. These challenges have compelled healthcare institutions to adopt a change strategy that contributes to the effective development of all administrative elements, including organizational structure, goals, strategic plans, management methods, and the employees within, fostering harmony, alignment, and acceptance of the rapid changes (Mousaid & Temizar, 2017).

Hospitals are among the most critical institutions in need of enhancing their performance efficiency and improving the quality of healthcare

services they provide. This is due to the rapid changes and advancements in medical sciences and knowledge, as well as the successive practical discoveries in the healthcare field. These include combatting prevalent diseases, prevention, and treatment. Consequently, the development of healthcare and research is a prominent feature of these institutions. This is essential to keep up with scientific and technological advancements in the healthcare sector, thereby contributing to the enhancement of their performance efficiency. The healthcare sector is a vital area for the growth and continuous provision of diverse healthcare services by hospitals. However, this can only be achieved through responsible management that monitors change and tracks both external and internal variables within the hospital (Sharaf, 2018).

The concept of hospital performance efficiency is reflected through the evaluation of services provided to citizens and their satisfaction with them. Efficiency of performance has become the primary goal and focus of hospitals, aiming to identify citizens' needs and provide services that contribute to achieving them. This is especially true given the changes in information technology and communication, which have empowered beneficiaries to differentiate between services and their performance efficiency based on their preferences and choices. This has driven hospitals to prioritize service quality and enhance their performance efficiency, as citizens increasingly seek such improvements (Obeid *et al.*, 2021).

The results of a study conducted by Ali and others (2021) affirmed the positive role of change management, which encompasses elements such as cultural change, change duration, change assessment, degree of change, and change advocacy, in enhancing the efficiency of hospital performance and healthcare quality. Additionally, the findings of a study by Abdel-Satar *et al.,* (2022) supported the presence of a significant impact of change management on the quality of healthcare services. Furthermore, a study by Almutairi and colleagues (2022) indicated a statistically significant correlation between dimensions of change management, including cultural, structural, human, and technological dimensions, and the quality of healthcare services in hospitals. The study recommends the importance of thorough and well-planned change processes, involving long-term strategic planning and short-term objectives. It emphasizes the necessity for organizational structural changes that align with the operational requirements within the hospital, as well as the activation of change management to enhance the efficiency of hospital performance at all levels.

In light of the foregoing, Prince Mohammed bin Abdulaziz Hospital in Riyadh, like other healthcare institutions, is required to improve its performance efficiency, harness all its capabilities and resources to fulfill its commitments, and make it capable of sustainability and competition. It should provide healthcare services to citizens with the highest possible efficiency and quality, considering the global changes and developments in all institutions, especially healthcare institutions. There have been changes in the expectations of Saudi citizens and an increase in their demand for the efficiency, performance, and quality of hospitals and the services they provide. Hospitals can only achieve this through the implementation of change management to adapt to these changes, as it is essential for enhancing hospital performance efficiency. Therefore, the study's problem can be summarized by answering the following question:

What is Impact of Change Management on Enhancing Performance Efficiency at Prince Mohammed bin Abdulaziz Hospital in Riyadh?

Study Questions:

- What is the current state of change management at Prince Mohammed bin Abdulaziz Hospital at Riyadh?
- What is the level of performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh?

Study Hypotheses:

- There is a statistically significant impact of the cultural dimension in change management on the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh.
- There is a statistically significant impact of the technological dimension in change management on the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh.
- There is a statistically significant impact of the structural dimension in change management on the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh.
- There is a statistically significant impact of the human dimension in change management on the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh.

Study Objectives:

- To assess the current state of change management at Prince Mohammed bin Abdulaziz Hospital at Riyadh.
- To evaluate the level of performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh.
- To examine the relationship between the dimensions of change management and the enhancement of performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh.
- To investigate the relationship between the responses of the study sample based on variables such as job function and years of experience and the impact of change management on enhancing the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh.

Study Significance:

Firstly, the theoretical significance of the study aims to address some gaps in the literature on change management and its role in enhancing the performance efficiency of hospitals. It seeks to develop a new understanding of the concept and requirements of applying change management, enriching the Saudi library with a new topic on the impact of change management in enhancing the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh.

Secondly, the practical significance of the study contributes to understanding the role and importance of change management in enhancing the performance efficiency of hospitals. It helps identify key recommendations that can be employed to utilize change management in improving the performance efficiency of healthcare institutions. This aids decision-makers in its application, thus contributing to improving performance efficiency at Prince Mohammed bin Abdulaziz Hospital specifically and government hospitals in the Kingdom of Saudi Arabia in general.

Study Limitations:

- **Geographical Limitation**: The study will be conducted in Riyadh, Saudi Arabia.
- **Time Limitation**: The study will be conducted in the year 1445 (Hijri calendar).
- **Human Limitation:** The study will involve a sample of administrative and healthcare staff at Prince Mohammed bin Abdulaziz Hospital at Riyadh.
- **Subject Matter Limitation**: The study is focused on " The Impact of Change Management on Enhancing Performance Efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh".

Literature Review

The aim of the study (Vlassi & *et al.*, 2023) titled "The Impact of Change Management in the Greek National Health System: A Quantitative Study" was to investigate the effects of change management. The study revealed that changes cannot be implemented randomly; they demand meticulous planning and organization. Leadership is crucial in ensuring that change initiatives are in harmony with broader strategic goals. It is imperative to monitor these significant structural reforms in the Greek National Health System with updated data over the coming years to evaluate their effectiveness and assess their impact on the operation and performance of Greek hospitals.

The aimed of the study (Abdel-Satar *et al.*, 2022) was to examine the impact of change management on the quality of health services in both government and private hospitals, incorporating resistance to change as a moderator variable. To fulfill the study's purpose, the researcher employed a sampling method, randomly selecting units (doctors, nurses, patients) from private and government hospitals. The study yielded various results, with a key finding indicating a significant effect of change management on the quality of health services. The study's recommendations underscore the importance of overcoming resistance to change for a successful change process and advocate for the encouragement of medical institutions to actively manage change for the optimal delivery of medical services.

RESEARCH METHODOLOGY

- **Research Design**

In this research, the descriptive approach was used, characterized by its emphasis on describing and elucidating the occurrences within a community. The descriptive approach is recognized for portraying and explaining the unfolding events in a given context. Furthermore, it can be defined as a methodology employed to delineate phenomena within society, utilizing statistical methods to establish connections between variables, thereby deducing relationships among the study variables. These relationships are then leveraged to predict the occurrence of these phenomena in the future.

The primary objective of this study is to illuminate the Impact of Change Management on Enhancing Performance Efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh. To achieve this goal, the researcher opted for the descriptive approach. The descriptive approach facilitates an exploration of the influence of Culture, Technological, Structural and Human Dimension on Performance Efficiency by collecting pertinent data through a structured questionnaire.

- **Study Population and Sample**

Quantitative analysis relies heavily on the use of samples since it is impractical to survey the complete population. This is particularly true when the target demographic is large, as in the case all employees at Prince Mohammed bin Abdulaziz Hospital at Riyadh. As a result, we decided to send our survey to a select group of people. In order to more confidently extrapolate our findings to the entire population, we should take a random sample from that population. This would ensure that every member of the population has an equal chance of being selected to participate in the study. Our goal in selecting this sample was to ensure that it was representative of all employees at Prince Mohammed bin Abdulaziz Hospital at Riyadh. So, the study sample consisted of (150) from the study items (Administrative, Doctor, Nurse and Technician).

- **Data Collection:** Questionnaire Design

The questionnaire was designed to understand the Impact of Change Management on Enhancing Performance Efficiency. The questionnaire was composed by three sections as follows:

The first section: it contains questions regarding participant's demographic characteristics. It includes five

questions Expresses demographic characteristics for participants.

The second section: aim to measure the independent variable which is change management on a Likert scale of 1-5 (1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree) This section consist of 16 questions distributed in four dimensions, which are Culture, Technological, Structural and Human Dimension.

The third section: aim to independent variable which is performance efficiency on a Likert scale of 1-5 (1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree). This section consists of 20 questions.

- **Variables and Measurements**

The current study consisted of the following variables:

Independent variables: The independent variable is changing management which consists of four dimensions which are:

- Culture Dimension: It consists of four questions.
- Technological Dimension: It consists of four questions.
- Structural Dimension: It consists of four questions.
- Human Dimension**:** It consists of four questions.

Dependent variables: The dependent variable is performance efficiency consist of 20 questions.

- **Data Analysis**

The researcher used the statistical software SPSS for data analysis, which is the appropriate method for such types of studies. Several statistical methods were employed, including:

- Pearson Correlation coefficient: This was used to ensure the validity of internal consistency.
- Cronbach's Alpha Scale: This test was utilized to confirm the reliability of the questionnaire.
- Frequencies and percentages: of study sample responses.
- Mean and standard deviation: for each statement in the questionnaire, as well as the calculation of the mean and standard deviation for each axis of the questionnaire.
- Simple Linear Regression coefficient: This was used to determine the strength and direction of the relationship between each dimension of the independent variable and the dependent variable.

- **Validity and Reliability of the study**

Internal validity the researchers used the Pearson Correlation Coefficient in order to test the internal validity of the questionnaire. And we will show the result of Pearson Correlation Coefficient between each statement and the total variable in the following tables.

Table (1): Pearson Correlation Coefficient for each statement of variable change management and the total variable

Dimension	Statements	Pearson Correlation	P-value
Cultural Dimension	The hospital seeks to enhance the performance of employees and increase their adaptability and skills.	.698**	0.000
	The hospital trains employees on change programs that contribute to improving the quality of services.	.781**	0.000
	Change management assists employees in accomplishing their tasks with high efficiency.	.823**	0.000
	The hospital's culture, goals, and strategic plans contribute to improving the quality of services provided.	.705**	0.000
Technological Dimension	The hospital is concerned with keeping up with technological advancements and employing technology and its programs in service delivery.	.678**	0.000
	Technological capabilities in the hospital are characterized by high efficiency, contributing to the accuracy and speed of task completion.	.765**	0.000
	The hospital continuously trains employees on technology, programs, and technological innovations to keep up with changes.	.745**	0.000
	The hospital works on electronically automating its procedures and services to enhance service quality, ease, speed, and accuracy.	.814**	0.000
Structural Dimension	The hospital periodically develops its organizational structure to adapt to the management of the change process and development.	.773**	0.000
	The organizational structure in the hospital works to increase delegating authority to employees at other levels and reduce bureaucracy.	.775**	0.000
	There is ease in the flow of communication between different departments and administrations in the hospital, characterized by precision and speed.	.841**	0.000
	The hospital faces resistance to change in the delivery of services.	.807**	0.000

Dimension	Statements	Pearson Correlation	P-value
Human Dimension	The hospital seeks to create a work environment and atmosphere of camaraderie, trust, respect, constructive competition, and a sense of psychological well-being among employees.	.808**	0.000
	The hospital encourages employees to confront work-related challenges, helps them find solutions, and motivates them to bring about the desired change.	.850**	0.000
	The hospital provides employees with material and moral incentives, as well as promotions, to encourage them to pursue change.	.821**	0.000
	The hospital is committed to identifying the training needs of employees, working on their development, and providing them with skills and knowledge to assist them in the change process.	.788**	0.000

**. Correlation is significant at the 0.01 level (2-tailed).

From the previous table we note that the P-Value for each statement are less that (0.05), which mean that the Correlation Coefficients are significant at $= 5\%$. So, we can say that change management (Cultural, Technological, Structural, Human Dimension) is valid to measure what they make for.

Table (2): Pearson Correlation Coefficient for each statement of variable performance efficiency and the total variable

Statements	Pearson Correlation	P-value
The hospital is committed to providing health services at specified times.	.556**	0.000
The hospital offers all medical specialties, emergency services, and pharmaceutical care.	.623**	0.000
The hospital facilitates work procedures and policies to ensure speed and ease in delivering services with the best quality.	.671**	0.000
The hospital informs patients about service schedules and costs.	.648**	0.000
Reports and statistics specific to the hospital are prepared regularly.	.612**	0.000
A separate medical record is permanently maintained for each service recipient.	.637**	0.000
The hospital provides medications for all medical conditions.	.669**	0.000
The necessary devices and equipment are available in the hospital.	.650**	0.000
Security and safety standards are applied in operating and delivering devices and equipment in the hospital.	.586**	0.000
Necessary facilities for various laboratory tests are available around the clock.	.633**	0.000
There are sufficient operating rooms in the hospital for all specialties.	.589**	0.000
The hospital provides nurseries for newborns.	.577**	0.000
The hospital has an intensive care unit that meets the needs of patients.	.524**	0.000
Doctors in all specialties are available at the hospital to meet patient needs.	.570**	0.000
A designated area is available for receiving emergency cases around the clock.	.618**	0.000
The hospital pays attention to sterilization and disinfection processes, providing measures to prevent the spread of infections.	.636**	0.000
The hospital is attentive to follow-up and periodic auditing processes.	.622**	0.000
The hospital emphasizes the commitment of staff to etiquette and good treatment with patients.	.654**	0.000
The hospital maintains the confidentiality of patients' private information.	.631**	0.000
The hospital provides signs and directional boards to facilitate access to departments and branches within the hospital.	.666**	0.000

**. Correlation is significant at the 0.01 level (2-tailed).

From the previous table we note that the P-Value for each statement are less that (0.05), which mean that the Correlation Coefficients are significant at $= 5\%$. So, we can say that performance efficiency variable is valid to measure what they make for.

Structure validity

The researcher used the Pearson Correlation Coefficient in order to test the structure validity of the questionnaire. And we will show the result of Pearson Correlation Coefficient between each variable and all the other variables and table (3) show what we found.

Table (3): Pearson Correlation Coefficient between each variable and all the other variables

	Cultural Dimension	Technological Dimension	Structural Dimension	Human Dimension	Change management	Performance efficiency
Cultural Dimension	1	.660**	.679**	.678**	.859**	.487**
Technological Dimension	.660**	1	.666**	.718**	.874**	.513**
Structural Dimension	.679**	.666**	1	.770**	.882**	.503**
Human Dimension	.678**	.718**	.770**	1	.899**	.555**
change management	.859**	.874**	.882**	.899**	1	.586**
performance efficiency	.487**	.513**	.503**	.555**	.586**	1

**. Correlation is significant at the 0.01 level (2-tailed).

From table (3) we note that all the Correlation Coefficients are significant at = 1% . So, we can say that all variables is valid to measure what they make for.

Demographic Characteristics

There were several questions developed to measure demographic characteristics. These questions include gender, educational level, Occupation, Number of Training Courses and experience. And table (4) shows the demographic characteristics of the sample in this study.

Table (4): The demographic characteristics of the sample

Demographic		Frequency	Percent
Gender	Male	84	56.00%
	Female	66	44.00%
Educational Level	Diploma	9	6.00%
	Bachelor's	44	29.33%
	Postgraduate (Master's - PhD)	97	64.67%
Occupation	Administrative	22	14.67%
	Doctor	65	43.33%
	Nurse	50	33.33%
	Technician	13	8.67%
Number of Years of Experience	1-5 years	24	16.00%
	6-10 years	103	68.67%
	11-15 years	15	10.00%
	16-25 years	8	5.33%
Number of Training Courses Attended	None	13	8.67%
	1-3 training courses	99	66.00%
	4-7 training courses	34	22.67%
	8-10 training courses	4	2.67%

From the previous table we note that:

- A high proportion of the sample are males, the number of 84 with percentage 56% while the number of female 66 and with percentage 44%.
- The majority of the sample study are having a Postgraduate (Master's - PhD) degree, where the number was 97 with percentage 64.67%, Followed by the Bachelor's degree Where the number was 44 with percentage 29.33%, the Diploma degree is the lowest sample group, with a total of 9 individuals and percentage 6%.
- A high proportion of the sample are Doctor, the number of 65 with percentage 43.33 % While the number of Nurse was 50 and with percentage 33.33% and the number of Administrative was 22 and with percentage 14.67 %, and the Technician are the lowest sample group, with a total of 13 individuals and percentage 8.67%.
- The majority of the sample study are having from 6-10 years of experience, where the number was 103 with percentage 68.67%, followed by the individual who having 1-5 years of experience Where the number was 24 with percentage 16%, then the individual who having from 11-15 years of experience with 15 and percentage 10.00%, the individual who having from 16-25 years of experience is the lowest sample group, with a total of 8 and percentage 5.33%.

- The majority of the sample study are attended from 1-3 training courses, where the number was 99 with percentage 66%, followed by the individual who attended from 4-7 training courses Where the number was 34 with percentage 22.67%, then the individual who never attended any curses with 13 and percentage 8.67%, the individual who attended from 8-10 training courses is the lowest sample group, with a total of 4 and percentage 2.67%.

Descriptive Statistics for the innovation Variable

In this part we will present the results of the Descriptive statistics for the change management variable. which included the mean, standard deviation and Relative importance for each statement of the variable. And table (5) shows the result we have obtained.

Table (5): Means, standard deviations and Relative importance for change management variable

Statements	Mean	Std. Deviation	Relative importance	order
The hospital seeks to enhance the performance of employees and increase their adaptability and skills.	4.80	0.71	95.93%	1
The hospital trains employees on change programs that contribute to improving the quality of services.	4.42	1.08	88.43%	4
Change management assists employees in accomplishing their tasks with high efficiency.	4.43	1.11	88.50%	3
The hospital's culture, goals, and strategic plans contribute to improving the quality of services provided.	4.67	0.90	93.36%	2
Cultural Dimension	4.58	0.72		
The hospital is concerned with keeping up with technological advancements and employing technology and its programs in service delivery.	4.82	0.68	96.39%	1
Technological capabilities in the hospital are characterized by high efficiency, contributing to the accuracy and speed of task completion.	4.53	1.01	90.54%	2
The hospital continuously trains employees on technology, programs, and technological innovations to keep up with changes.	4.32	1.17	86.32%	3
The hospital works on electronically automating its procedures and services to enhance service quality, ease, speed, and accuracy.	4.21	1.22	84.11%	4
Technological Dimension	4.47	0.77		
The hospital periodically develops its organizational structure to adapt to the management of the change process and development.	4.60	0.92	92.07%	4
The organizational structure in the hospital works to increase delegating authority to employees at other levels and reduce bureaucracy.	4.79	0.71	95.71%	1
There is ease in the flow of communication between different departments and administrations in the hospital, characterized by precision and speed.	4.65	0.88	93.07%	2
The hospital faces resistance to change in the delivery of services.	4.64	0.90	92.82%	3
Structural Dimension	4.67	0.68		
The hospital seeks to create a work environment and atmosphere of camaraderie, trust, respect, constructive competition, and a sense of psychological well-being among employees.	4.72	0.79	94.36%	2
The hospital encourages employees to confront work-related challenges, helps them find solutions, and motivates them to bring about the desired change.	4.71	0.83	94.18%	3
The hospital provides employees with material and moral incentives, as well as promotions, to encourage them to pursue change.	4.41	1.08	88.11%	4
The hospital is committed to identifying the training needs of employees, working on their development, and providing them with skills and knowledge to assist them in the change process.	4.76	0.74	95.11%	1
Human Dimension	4.65	0.70		
change management	4.59	0.63		

From table (5) we note that:

- The mean for the Total of change management variable are (4.59) with standard deviation (0.63). This indicates the high importance of this variable from the respondents' point of view.
- For cultural Dimension the mean are (4.58) with standard deviation (0.72).The value of the mean ranged between (4.80, 4.42), and the value of the standard deviation ranged between (1.11, 0.71) and statement " The hospital seeks to enhance the performance of employees and increase their

adaptability and skills." ranked first with mean (4.80) and standard deviation (0.71) and statement " The hospital trains employees on change programs that contribute to improving the quality of services." ranked the last with mean (4.42) and standard deviation (1.08)). This indicates the high importance of this Dimension from the respondents' point of view.

- For Technological Dimension the mean are (4.47) with standard deviation (0.77).The value of the mean ranged between (4.82, 4.21), and the value of the standard deviation ranged between (1.22, 0.68) and statement "The hospital is concerned with keeping up with technological advancements and employing technology and its programs in service delivery." ranked first with mean (4.82) and standard deviation (0.68) and statement "The hospital works on electronically automating its procedures and services to enhance service quality, ease, speed, and accuracy." ranked the last with mean (4.21) and standard deviation (1.22). This indicates the high importance of this Dimension from the respondents' point of view.
- For Structural Dimension the mean are (4.67) with standard deviation (0.68).The value of the mean ranged between (4.79, 4.60), and the value of the standard deviation ranged between (0.92, 0.71) and statement "The organizational structure in the hospital works to increase delegating authority to employees at other levels and reduce bureaucracy." ranked first with mean (4.79) and standard deviation (0.71) and statement "The hospital periodically develops its organizational structure to adapt to the management of the change process and development." ranked the last with mean (4.60) and standard deviation (0.92).This indicates the high importance of this Dimension from the respondents' point of view.
- For Human Dimension the mean are (4.65) with standard deviation (0.70).The value of the mean ranged between (4.76, 4.41), and the value of the standard deviation ranged between (1.08, 0.74) and statement " The hospital is committed to identifying the training needs of employees, working on their development, and providing them with skills and knowledge to assist them in the change process." ranked first with mean (4.76) and standard deviation (0.74) and statement " The hospital provides employees with material and moral incentives, as well as promotions, to encourage them to pursue change." ranked the last with mean (4.41) and standard deviation (1.08).This indicates the high importance of this Dimension from the respondents' point of view.

Table (6): Means, standard deviations and Relative importance for performance efficiency variable

Statements	Mean	Std. Deviation	Relative importance	Order
The hospital is committed to providing health services at specified times.	3.63	1.57	72.54%	15
The hospital offers all medical specialties, emergency services, and pharmaceutical care.	4.07	1.31	81.32%	10
The hospital facilitates work procedures and policies to ensure speed and ease in delivering services with the best quality.	3.85	1.43	77.04%	14
The hospital informs patients about service schedules and costs.	3.90	1.40	78.00%	12
Reports and statistics specific to the hospital are prepared regularly.	3.99	1.35	79.71%	11
A separate medical record is permanently maintained for each service recipient.	3.47	1.61	69.32%	16
The hospital provides medications for all medical conditions.	2.96	1.61	59.21%	18
The necessary devices and equipment are available in the hospital.	2.68	1.56	53.57%	19
Security and safety standards are applied in operating and delivering devices and equipment in the hospital.	2.97	1.58	59.43%	17
Necessary facilities for various laboratory tests are available around the clock.	2.49	1.47	49.71%	20
There are sufficient operating rooms in the hospital for all specialties.	4.38	1.11	87.54%	4
The hospital provides nurseries for newborns.	4.38	1.11	87.68%	3
The hospital has an intensive care unit that meets the needs of patients.	4.57	0.96	91.43%	1
Doctors in all specialties are available at the hospital to meet patient needs.	4.56	0.97	91.25%	2
A designated area is available for receiving emergency cases around the clock.	3.94	1.37	78.82%	13
The hospital pays attention to sterilization and disinfection processes, providing measures to prevent the spread of infections.	4.22	1.27	84.43%	8
The hospital is attentive to follow-up and periodic auditing processes.	4.34	1.17	86.75%	5
The hospital emphasizes the commitment of staff to etiquette and good treatment with patients.	4.23	1.23	84.61%	7
The hospital maintains the confidentiality of patients' private information.	4.29	1.21	85.82%	6
The hospital provides signs and directional boards to facilitate access to departments and branches within the hospital.	4.19	1.24	83.82%	9

performance efficiency	3.86	0.82	

From table (5) we note that the mean for the Total of performance efficiency variable are (3.86) with standard deviation (0.82). The value of the mean ranged between (4.57, 2.49), and the value of the standard deviation ranged between (1.61, 0.96) and statement " The hospital has an intensive care unit that meets the needs of patients." ranked first with mean (4.57) and standard deviation (0.96) and statement "Necessary facilities for various laboratory tests are available around the clock." ranked the last with mean (2.49) and standard deviation (1.47).This indicates the high importance of this Dimension from the respondents' point of view.

Hypothesis testing

The first Hypothesis test (H1)

The first hypothesis states that "There is a statistically significant impact of the cultural dimension in change management on the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh." and for testing this hypothesis we used simple regression analysis the results as shown in Table (7).

Table (7): Results of simple Regression Analysis of Testing first Hypothesis (H1)

Dependent Variable	Model Summary			ANOVA		Coefficients			
	R	R Square	Adjusted R Square	F	Sig.	Independent Variable	B	t	Sig.
performance efficiency	0.487	0.237	0.236	173.78	0.000	(Constant)	1.301	6.637	0.000
						Cultural Dimension	0.558	13.183	0.000

Table (7) indicated that the independent variables (Cultural Dimension) explain 23.6% of the variance in the dependent variable (performance efficiency) in terms of the value of determination factor (Adj.R2 = 0.236). The results showed that the overall effect of independent variable (Cultural Dimension) on the dependent variable (performance efficiency) was statistically significant (F =173.78, Sig. = 0.000). In relation to independent variable effects, it was found that (Cultural Dimension) had a significant effect on (performance efficiency) where (ß = 0.558, t-value = 13.183, Sig. = 0.000).

Based on these findings, the null hypothesis was rejected and instead the alternative hypothesis was accepted. That is to say, there are statistically significant effects of Cultural Dimension on performance efficiency.

The second Hypothesis test (H2)

The second hypothesis states that "There is a statistically significant impact of the technological dimension in change management on the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh." and for testing this hypothesis we used simple regression analysis the results as shown in Table (8).

Table (8): Results of simple Regression Analysis of Testing second Hypothesis (H2)

Dependent Variable	Model Summary			ANOVA		Coefficients			
	R	R Square	Adjusted R Square	F	Sig.	Independent Variable	B	t	Sig.
performance efficiency	0.513	0.263	0.262	199.532	0.000	(Constant)	1.413	8.057	0.000
						Technological Dimension	0.547	14.126	0.000

Table (8) indicated that the independent variables (Technological Dimension) explain 26.2% of the variance in the dependent variable (performance efficiency) in terms of the value of determination factor (Adj.R2 = 0.262). The results showed that the overall effect of independent variable (Technological Dimension) on the dependent variable (performance efficiency) was statistically significant (F =199.532, Sig. = 0.000). In relation to independent variable effects, it was found that (Technological Dimension) had a significant effect on (performance efficiency) where (ß = 0.547, t-value = 14.126, Sig. = 0.000).

Based on these findings, the null hypothesis was rejected and instead the alternative hypothesis was accepted. That is to say, there are statistically significant effects of Technological Dimension on performance efficiency.

The third Hypothesis test (H3)

The third hypothesis states that "There is a statistically significant impact of the structural dimension in change management on the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh." and for testing this hypothesis we used simple regression analysis the results as shown in Table (9).

Table (9): Results of simple Regression Analysis of Testing third Hypothesis (H3)

Dependent Variable	Model Summary			ANOVA		Coefficients			
	R	R Square	Adjusted R Square	F	Sig.	Independent Variable	B	t	Sig.
performance efficiency	0.503	0.253	0.251	188.692	0.000	(Constant)	1.022	4.904	0.000
						Structural Dimension	0.606	13.737	0.000

Table (9) indicated that the independent variables (Structural Dimension) explain 25.1% of the variance in the dependent variable (performance efficiency) in terms of the value of determination factor (Adj.R2 = 0.251). The results showed that the overall effect of independent variable (Structural Dimension) on the dependent variable (performance efficiency) was statistically significant (F =188.692, Sig. = 0.000). In relation to independent variable effects, it was found that (Structural Dimension) had a significant effect on (performance efficiency) where (ß = 0.606, t-value = 13.737, Sig. = 0.000).

Based on these findings, the null hypothesis was rejected and instead the alternative hypothesis was accepted. That is to say, there are statistically significant effects of Structural Dimension on performance efficiency.

The fourth Hypothesis test (H4)

The forth hypothesis states that "There is a statistically significant impact of the human dimension in change management on the performance efficiency at Prince Mohammed bin Abdulaziz Hospital at Riyadh." and for testing this hypothesis we used simple regression analysis the results as shown in Table (10).

Table (10): Results of simple Regression Analysis of Testing fourth Hypothesis (H4)

Dependent Variable	Model Summary			ANOVA		Coefficients			
	R	R Square	Adjusted R Square	F	Sig.	Independent Variable	B	t	Sig.
Performance efficiency	0.555	0.308	0.306	248.014	0.000	(Constant)	0.836	4.310	0.000
						Human Dimension	0.650	15.748	0.000

Table (10) indicated that the independent variables (Human Dimension) explain 30.6% of the variance in the dependent variable (performance efficiency) in terms of the value of determination factor (Adj.R2 = 0.306). The results showed that the overall effect of independent variable (Human Dimension) on the dependent variable (performance efficiency) was statistically significant (F =248.014, Sig. = 0.000). In relation to independent variable effects, it was found that (Human Dimension) had a significant effect on (performance efficiency) where (ß = 0.650, t-value = 15.748, Sig. = 0.000).

Based on these findings, the null hypothesis was rejected and instead the alternative hypothesis was accepted. That is to say, there are statistically significant effects of Human Dimension on performance efficiency.

CONCLUSION

The study on the impact of change management on enhancing performance efficiency at Prince Mohammed bin Abdulaziz Hospital in Riyadh has revealed valuable insights into the dynamics of organizational change and its effects on overall performance. The findings indicate a significant positive correlation between effective change management strategies (Cultural, Technological, Structural, and Human Dimension) and enhancing performance efficiency within the organization. Successful implementation of change initiatives has been shown to lead to increased employee engagement, streamlined processes, and a more adaptive organizational culture. These outcomes collectively contribute to a heightened level of performance and productivity. As organizations navigate an increasingly dynamic business environment, the importance of embracing change management practices becomes evident in sustaining and enhancing operational effectiveness.

Research Limitations

Despite the valuable contributions of this study, it is essential to acknowledge its limitations. Firstly, the generalizability of the findings may be constrained by the specific context and industry characteristics of the Prince Mohammed bin Abdulaziz Hospital. Different sectors and organizational structures may respond differently to change, and thus, caution should be exercised in applying these results universally. Additionally, the reliance on self-reported data and survey responses introduces the possibility of response bias and may not capture the full complexity of change management processes. Future research could address these limitations by incorporating

diverse industries, utilizing mixed-methods approaches, and incorporating objective performance metrics.

Recommendations

Based on the study's findings and the identified limitations, several recommendations emerge for practitioners and researchers interested in optimizing change management for performance efficiency:

- The necessity of thorough and well-planned change management through the development of long-term strategic plans, along with the presence of short-term goals.
- The importance of ensuring that organizational structural changes align with the internal work requirements within the hospital, following a careful study of both internal and external environmental change requirements.
- Working on automating systems within the government sector and developing technology for use within the hospital to enhance the quality of healthcare services provided by the hospital.
- The importance of clearly defining authority, responsibility, and the function of each hospital management department, ensuring there is no overlap in powers.
- The need for management to interact positively with employees, emphasizing human relations by appreciating the efforts of the workforce and establishing incentive systems to motivate hospital staff.
- Prioritizing the satisfaction of beneficiaries of the healthcare services provided, as obtaining information from beneficiaries is a crucial aspect of change management.

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