



ADDIS ABABA UNIVERSITY
SCHOOL OF COMMERCE

**CHANGE MANAGEMENT PRACTICES; A CASE STUDY
ON TRUST PHARMACEUTICAL MANUFACTURING PLC**

By: Eyuel Yeneneh

**A Project Work Submitted to Addis Ababa University School of
Graduate Studies in Partial Fulfillment of the Requirements for the
Degree of Master of Arts (MA) in Project Management**

Advisor: Dr. Bahran Asrat (PhD)

June 2024 G.C

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Declaration

I, Eyuel Yeneneh, the under signed, hereby declare that this research project work entitled “**Change Management Practices; A Case Study on Trust Pharmaceutical Manufacturing Plc**” as my original paper work and that it has not been submitted before anywhere either at Masters level or Undergraduate for any award. Any information used from other works has been acknowledged.

Name: - **Eyuel Yeneneh.**

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Date: -----

Statement of Certification

This is to certify that Eyuel Yeneneh has carried out this project work entitled “**Change Management Practices; A Case Study on Trust Pharmaceutical Manufacturing Plc**” under my supervision.

This work is his own original work and it is sufficient for submission as the partial fulfillment for the award of Degree of Masters of Art (MA) in Project Management.

Name: - **Dr. Bahran Asrat (PhD)**

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Date _____

Approval by Examiners

Members of the Board of Examiners approve this research project entitled “**Change Management Practices; A Case Study on Trust Pharmaceutical Manufacturing Plc**” undertaken by Eyuel Yeneneh fulfills the requirements for the Degree of Master of Arts in Project Management and is acceptable with regards to the standards and regulations of the University.

Approved by Board of Examiners:

Internal Examiner: _____ **Signature** _____ **Date** _____

External Examiner: _____ **Signature** _____ **Date** _____

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Acronyms / Abbreviations

PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PMO	Project Management Office
CAGR	Cumulative annual growth rate
R&D	Research and Development
Pvt. Ltd	Private Limited
FDA	Federal Druga Authority
KPI	Key Performance Indicators
QA/QC	Quality Assurance/Quality Control
SPSS	Statistical Package for Social Students

Abstract

Change management plays a crucial role in influencing project success in pharmaceutical manufacturing by ensuring a structured approach to transitioning individuals, processes, and organizations. In the pharmaceutical industry, effective change management is essential to prevent non-compliance and maintain product quality and safety. This study aimed to investigate and analyze the initial change management strategies and plans prepared and explore the level of awareness regarding change and change management all the stakeholders initially had in Trust Pharmaceutical Manufacturing PLC. The study used descriptive and explanatory methods and followed a combination of quantitative and qualitative research methods. A census sampling was used in this study since the total population was small. A questionnaire was sent out to all the 45 stakeholders of the project. From the sent-out questionnaires, all were filled and returned. Then, regression and descriptive statistics were used for the analysis after the questionnaires were collected and interviews were conducted to the top management. And the result showed that in the drafting and implementation of change management for the project success, the change management strategies trust pharmaceuticals had like the change model implemented, stakeholders' awareness, engagement and participations and the internal communications, with an average mean value of 4.4 and S.D value of 0.57 had a positive role on project success. The organizational factors like the organization's culture and environment, structure and hierarchal level, the resources allocated for the change management had an average mean value of 4.28 and S.D value of 0.39 had a positive impact on the success of the project. The contextual factors that were investigated like the regulatory rules of the pharmaceutical industry, the technological advancement, market dynamics and competitions and the external stakeholders influence had an average mean of 4.42, with a standard deviation of 0.44, had a positive impact on project success. And a well-defined and structured change management strategy being in place was the critical success factors for effective change management. The research concluded that implementation of an effective change management has a significant and positive role for project success.

Key words: - Change, Change management, Project Success.

CHAPTER ONE: INTRODUCTION

This chapter discusses the subject of the research. It includes research background, problem definitions (Statement of the problems), research objectives, research questions, scope of the study, significance of the study, Research limitations, and organizations of the study.

1.1. Background of the study

The pharmaceutical industry is a significant sector that plays a critical role in healthcare, research, and innovation worldwide. The industry is responsible for the research, development, production, and distribution of medications. The market has experienced significant growth during the past two decades, and pharma revenues worldwide totaled 1.48 trillion U.S. dollars in 2022.

In Ethiopia, the revenue in the Pharmacies market is projected to reach US\$489.50m in 2024. It is expected to show an annual growth rate (CAGR 2024 - 2028) of -2.69%, resulting in a market volume of US\$438.90m by 2028. The pharmacy market in Ethiopia is experiencing a surge in demand for traditional herbal medicines.

Ethiopia has shown a growing preference for pharmacies as a convenient and accessible source for healthcare needs. Pharmacies provide a wide range of over-the-counter medications, as well as prescription drugs, making them a one-stop shop for customers' medical needs. Additionally, pharmacies often offer personalized services such as health consultations and advice, which further attract customers.

The pharmaceutical industry is characterized by rapid advancements in technology and regulatory requirements as well as increased value chain participants.

The pharmaceutical value chain refers to the series of steps involved in the development, manufacturing, distribution, and sale of pharmaceutical products. It encompasses various stages from research and development (R&D) to the delivery of medicines to patients.

The Ethiopian population has been increasingly seeking better access to quality healthcare services. As a result, the demand for pharmaceutical products has been growing steadily. The customers in Ethiopia are becoming more aware of the importance of healthcare and are willing to spend more on quality medical products. But, the pharmaceuticals market in Ethiopia has been growing at a steady pace. The market is dominated by generic drugs, which are cheaper alternatives to branded drugs. The demand for generic drugs has been growing due to their affordability. The government has been

promoting the use of generic drugs to reduce the cost of healthcare. The pharmaceutical companies in Ethiopia have been focusing on producing generic drugs to meet the growing demand

Trust Pharmaceuticals Pvt. Ltd. Co is a private limited company established in 2018 G.C and based in Addis Ababa, Ethiopia which is engaged in developing, manufacturing, distributing and exporting generic pharmaceutical products here locally and abroad in a different types of dosage forms including tablets, capsules, oral liquids and sachet. The company will manufacture and package medicines in its own manufacturing factory which is located in Debre Birhan, Ethiopia (which is around 120 km away from Addis Ababa) once the construction works are completed.

With an in-depth knowledge of the products and specialized expertise in manufacturing with leveraging technology and innovation in every day operations, Trust Pharmaceuticals works aiming to address both domestic and international distributors.

The pharmaceutical industry is known for its dynamic nature, characterized by evolving regulations, technological advancements, market demands, and healthcare trends. In this context, the establishment and project management of a pharmaceutical manufacturing factory are complex processes that require an advance planning, adaptability, and a keen awareness of industry shifts.

The driving forces for change could either come from the inside of the organization or from the outside of the organization. Introduction of change initiatives to any given organization is expected to impact the process, systems, organization structure and job roles in that organization (Voehl. & Harrington, 2016)

Change management is a handy-tool/technique used by organization development professionals, consultants, change managers etc in navigating organizations in the turbulent course of today 's business environment. (Smith, 2021).

1.2. Statement of the problem

The term change refers to the continuous modifications that an organization or individuals make to deal with adjustments in any matter (Waraich and Bhardwaj, 2007). In the continuously demanding environment for change as a result of globalization, technology evaluation or higher customer expectation, management of change is crucial for organization continuity and development. Therefore, change is a process, not an event. National Learning Consortium has defined change management from three integrated perspectives including process as “the application of the set of

tools, processes, skills and principles for managing the people side of change to achieve the required outcomes of a change project or initiative” (Kliewe, Davey and Baaken, 2013).

Pharmaceutical manufacturing companies often struggle and have a hard time to effectively implement in their projects new processes, technologies, and strategies to improve efficiency, quality, and compliance while maintaining operational stability. The lack of a structured approach to managing change in project management can lead to disruptions, delays, quality issues, and regulatory non-compliance.

Therefore, the problem statement focuses on understanding the key factors that influence the successful adaptation to project management of pharmaceutical manufacturing factories. By identifying these factors and exploring best practices and case studies, this study aims to provide insights and recommendations to help companies address the challenges associated with adapting to changes in their operations.

As pharmaceutical companies strive to innovate, expand their product portfolios, and meet stringent quality standards, the need to adapt to changes in the establishment and project management of manufacturing facilities becomes paramount. Factors such as globalization, digital transformation, sustainability requirements, and supply chain complexities further underscore the importance of flexibility and agility in project management practices.

1.3. Objectives of the study

1.3.1. General objective

The general objective is to assess the organizational change management practices at trust pharmaceutical manufacturing PLC.

1.3.2. Specific objectives

- To investigate the initial level of awareness the stakeholders had in Trust pharmaceutical manufacturing Company.
- To identify the factors that influence the change process and the challenges faced by the stakeholders.
- To evaluate the impact of change management on the project performance, quality, scope, schedule and cost.

- Assess the effectiveness of Trust Pharmaceutical Manufacturing PLC's change management strategies in adapting to evolving industry regulations and standards.
- Identify areas for improvement in change management processes within the establishment and project management phases, aiming to streamline workflows and decision-making,

1.4. Research questions

These questions are raised in the study to analyze the change Management and project success of a Pharmaceutical Manufacturing Factory. They are listed as follows,

1. What was the level of stakeholder awareness about change and change management at the beginning of the project?
2. What internal and external challenges did Trust Pharmaceutical Manufacturing encounter when implementing change management strategies?
3. What are the critical success factors for effective change management in a pharmaceutical manufacturing facility?
4. What recommendations and practical guidance can be provided to pharmaceutical manufacturing companies seeking to optimize their processes, enhance adaptability, and improve project management practices in response to evolving industry dynamics?

1.5. Significance of the study

By delving into the case study of Trust Pharmaceutical Manufacturing PLC, the research can identify best practices in change management, regulatory compliance, technological integration, and stakeholder engagement that can be applied by other organizations in the industry.

The research conducted on Trust Pharmaceutical Manufacturing PLC holds significant relevance for the pharmaceutical manufacturing industry by offering insights into effective plans and strategies for changes management to ensure project success. This study can serve as a valuable reference point for other pharmaceutical companies facing similar challenges.

Findings from this research can offer practical insights for project managers, decision-makers, and industry professionals on navigating changes effectively, optimizing resource allocation, enhancing project efficiency, and ensuring regulatory compliance in pharmaceutical manufacturing projects.

Insights derived from the study can empower Trust Pharmaceutical Manufacturing PLC and other companies in the industry to enhance their competitiveness, operational efficiency, and project

delivery capabilities through informed strategic decision-making and adaptation to evolving industry landscapes.

1.6. Scope of the study

The research will focus specifically on Trust Pharmaceutical Manufacturing PLC as a case study to analyze its strategies, challenges, and successes in adapting to changes.

The scope of the study can be discussed in terms of the issue under investigation (conceptual scope), geographical area, methodological aspects, and unit of analysis.

- Conceptual scope: conceptually, this study tries to understanding the concept of change management and its importance in project success. It involves examining different change management methodologies, strategies, and techniques that were applied in Trust Pharmaceutical Manufacturing PLC as a case study.
- Geographical scope: geographically, this study is delimited to Trust Pharmaceutical Manufacturing PLC both at the head office which is located in Addis Ababa, Ethiopia and the pharmaceutical manufacturing factory at Debre Birhan, Ethiopia.
- Methodological scope: Pertinent data is gathered using structured questionnaire and interview. Hence, the study applied mixed research approach and descriptive plus explanatory research design in order to meet the research objectives.
- Unit of analysis: In order to meet the research objectives data were gathered from different stakeholders like the founders of the company to the Project teams of Trust Pharmaceutical Manufacturing PLC. Thus, individual was the unit of analysis in this study.

1.7. Research limitations

The findings and insights derived from the case study of Trust Pharmaceutical Manufacturing PLC may have limitations in generalizing to the broader pharmaceutical manufacturing industry due to company-specific size, and operational uniqueness.

1.8. Organization of the Study

This structured organization of the study on adapting to changes in the establishment and project management of Trust Pharmaceutical Manufacturing PLC ensures a coherent flow of information, logical progression of ideas, and comprehensive coverage of key aspects related to change adaptation

in the pharmaceutical manufacturing industry. This study is composed of five chapters. The first chapter gives readers the general insight of the project. This chapter includes background of the study, background of the organization, problem statement, general and specific objectives, research questions, scope of the study, limitation and organization of the project. The second chapter reviews related literatures on stakeholder's management. It includes concepts and definitions; theoretical framework, and finally the researcher develops conceptual framework based on the reviews of the literatures. The third chapter includes the design and approach of the study performed to study the relation between variables. Then the population and sample size used for the data analysis; data source and collection method; model specification; analysis of data; reliability check; validity check; and ethical consideration of the project. The fourth chapter includes the data analysis and results of the descriptive and inferential statistics. It includes demographical distribution of the respondents; analysis and result of descriptive analysis; analysis and results of the correlation; and finally, the analysis and results of the regression. The fifth chapter includes three parts: - the summary of results; the conclusion of the project; the recommendations that the researcher made from the research.

1.9. Definition of key terms

Project: is a temporary endeavor undertaken to create a unique product or service" (PMI 2017 PMBOK guide).

Project Management: project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements (PMI, 2017). involves planning, organizing, executing, and controlling activities to achieve specific project goals within defined constraints such as time, budget, and scope.

Change: "moving a system, process or environment from one situation to another one as planned or unplanned" (Sabuncuoglu, 2003:258).

Change Management: a systematic approach to dealing with the transition or transformation of an organization's goals, processes or technologies (Pratt:2019)

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1. Introduction

This chapter will review a related literature regarding change management and project success.

2.2. Concept and Definition

2.2.1. Project and Project management

According to Project Management Institute. (2021), A project is a temporary endeavor undertaken to create a unique product, service, or result. Projects are characterized by their uniqueness, defined objectives, and specific timelines. They differ from ongoing operations in that they have a definite beginning and end, and they are undertaken to fulfill specific goals and objectives.

The Merriam-Webster.com online dictionary defines project management as the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. It involves the integration of various processes, including initiating, planning, executing, monitoring and controlling, and closing, to achieve specific project objectives within the constraints of scope, time, cost, and quality. (Merriam-websterdictionary, 2022). The Key Components of Project Management are,

1. Knowledge Areas: Project management encompasses several knowledge areas, such as integration, scope, time, cost, quality, human resource, communications, risk, procurement, and stakeholder management. (Merriam-websterdictionary, 2022)
2. Process Groups: Project management processes are grouped into five major categories: (Merriam-websterdictionary, 2022).
 - 2.1. Initiating: Defining and authorizing the project or a project phase.
 - 2.2. Planning: Establishing the scope, objectives, and course of action.
 - 2.3. Executing: Performing the work defined in the project plan to meet objectives.
 - 2.4. Monitoring and Controlling: Tracking, reviewing, and regulating project performance and progress.
 - 2.5. Closing: Finalizing all activities to formally complete the project or phase.
3. Tools and Techniques: Utilizing various methodologies, frameworks, and software tools to enhance efficiency and effectiveness in project management. (Meredith, J. R., & Mantel, S. J. 2012)

2.2.2. Project Success

Change is inevitable. (Flam Holtz and Randle,2008). It is a sure thing that it will occur. In the pharmaceutical manufacturing industry, the importance of project success cannot be overstated. The development and production of life-saving drugs and treatments are a critical component of global health, and the success of these projects can have a significant impact on the well-being of individuals and communities. However, the path to project success is not without its challenges. One key factor that can greatly influence the outcome of a pharmaceutical manufacturing project is change management. (Larson, E. W., & Gray, C. F. 2020). Project success in pharmaceutical manufacturing is often defined by the timely completion of projects within budget, achieving predefined quality standards, and meeting regulatory requirements. (Merriem-websterdictionary, 2022). Other success criteria include achieving the project's objectives, stakeholder satisfaction, and minimal disruption to ongoing operations. (Stouten et al., 2018) And some of the factors Influencing Project Success are, Regulatory Compliance: Adhering to regulations such as Good Manufacturing Practices (GMP) is critical. Non-compliance can lead to project delays and financial penalties. (Larson, E. W., & Gray, C. F. 2020). Quality Management: Ensuring high-quality standards in manufacturing processes to avoid product recalls and ensure patient safety. (Larson, E. W., & Gray, C. F. 2020). Risk Management: Identifying and mitigating risks associated with changes in manufacturing processes or technology. Stakeholder Engagement: Effective communication and involvement of all stakeholders, including employees, management, and regulatory bodies. (Flam Holtz and Randle,2008)

2.2.3. Change management in pharmaceutical manufacturing

According to a study by McKinsey, projects with excellent change management were six times more likely to meet or exceed their objectives than those with poor change management. In this essay, we will explore the crucial impact of change management on the success of pharmaceutical manufacturing projects. (McKinsey, 2008)

Change management is a crucial process for ensuring the successful implementation of changes in pharmaceutical manufacturing projects. By managing changes in a structured and systematic manner, organizations can minimize the risks and disruptions associated with changes, and increase the likelihood of project success. (Phillips, 2021) Effective change management involves planning, controlling, and implementing changes to a project or organization in a methodical way. This can include changes to production processes, equipment, or systems. (Phillips, 2021)

Change management in pharmaceutical manufacturing is the systematic approach to dealing with the transition or transformation of an organization's goals, processes, or technologies. (Hughes, 2007) It involves preparing, supporting, and helping individuals, teams, and the organization as a whole to make organizational change effectively. Change management aims to implement strategies for effecting change, controlling change, and helping people adapt to change. (Hughes, 2007).

Key Components:

- **Preparation and Planning**

According to Doyle & Brady, 2018, in the pharmaceutical manufacturing industry, changes can be driven by various factors, including regulatory updates, technological advancements, quality improvement initiatives, and market demands. Effective change management begins with thorough preparation and planning, which involves:

1. Identifying the Need for Change: Understanding the drivers behind the change, such as new regulatory requirements (e.g., FDA or EMA guidelines), advancements in manufacturing technology (e.g., automation, AI), or the need for improved quality control. (Doyle & Brady, 2018)
2. Stakeholder Analysis: Identifying all stakeholders affected by the change, including employees, management, regulatory bodies, suppliers, and customers. Understanding their needs, concerns, and the impact of the change on each group. (Doyle & Brady, 2018)
3. Creating a Change Management Plan: Developing a comprehensive plan that outlines the objectives, scope, timeline, resources, and strategies for implementing the change. This plan should include risk management strategies to address potential obstacles and resistance. (Doyle & Brady, 2018)
4. Communication Strategy: Establishing a clear communication plan to inform stakeholders about the change, its benefits, and how it will be implemented. Effective communication is crucial to alleviate concerns and build support for the change initiative. (Doyle & Brady, 2018)

- **Implementation and Execution**

The implementation phase involves putting the change management plan into action. In pharmaceutical manufacturing, this can be particularly complex due to the highly regulated

environment and the need for precision and consistency in manufacturing processes. (Doyle & Brady, 2018)

1. **Training and Development:** Providing comprehensive training to ensure that all employees understand the new processes, technologies, or regulations. This might involve hands-on training sessions, workshops, and e-learning modules. (Fowler, F. J., Jr. 2014)
 2. **Pilot Programs:** Conducting pilot programs or small-scale implementations to test the new processes or technologies. This allows for the identification and resolution of issues before full-scale implementation. (Fowler, F. J., Jr. 2014)
 3. **Change Agents:** Assigning change agents or champions who are responsible for facilitating the change process within their departments or teams. These individuals help to address concerns, provide support, and ensure adherence to the new processes. (Fowler, F. J., Jr. 2014)
 4. **Execution:** Rolling out the change across the organization, ensuring that all departments and teams are following the new procedures. This phase requires close coordination and monitoring to ensure that the change is implemented as planned. (Fowler, F. J., Jr. 2014)
- **Monitoring and Reinforcement**

After the initial implementation, it is essential to monitor the change process continuously and reinforce the new practices to ensure long-term success. (Fowler, F. J., Jr. 2014)

1. **Monitoring and Evaluation:** Regularly reviewing the progress of the change initiative against the defined objectives and key performance indicators (KPIs). This involves collecting data, conducting audits, and soliciting feedback from stakeholders. (Bamford, D. R., & Forrester, P. L. 2003)
2. **Addressing Issues:** Identifying and addressing any issues or challenges that arise during the implementation. This might involve additional training, process adjustments, or changes in strategy. (Bamford, D. R., & Forrester, P. L. 2003)
3. **Sustaining Change:** Reinforcing the new processes and behaviors to ensure they become ingrained in the organizational culture. This can be achieved through ongoing training, performance incentives, and regular communication. (Bamford, D. R., & Forrester, P. L. 2003)
4. **Continuous Improvement:** Encouraging a culture of continuous improvement where feedback is used to make ongoing enhancements to processes and practices. (Bamford, D. R., & Forrester, P. L. 2003)

The importance of change management in pharmaceutical manufacturing is highlighted by a study conducted by the Project Management Institute (PMI), which found that organizations that effectively manage change are more likely to complete projects on time, within budget, and to the satisfaction of stakeholders. (Elalmis, 2008:5).

2.3. Theoretical Literature Review

In the pharmaceutical manufacturing industry, effective change management is critical to ensuring project success. This sector is characterized by strict regulatory requirements, high standards for quality, and the necessity for continual innovation. This theoretical literature review examines the frameworks and models of change management and their impact on project success within pharmaceutical manufacturing companies. (Doyle & Brady, 2018).

2.3.1. Lewin's Change Management Model

Lewin's Change Management Model is one of the foundational theories in the field of change management. Developed by Kurt Lewin in the 1940s, the model provides a simple and intuitive framework for understanding and managing organizational change. It is structured around three key stages: Unfreezing, Changing (or Transition), and Refreezing. Each stage represents a distinct phase in the change process, guiding organizations through the necessary steps to implement and solidify change. (Hussain, et al., 2018).

Overview of Lewin's Change Management Model, according to Hiatt & Creasy (2012),

1. Unfreezing

The Unfreezing stage is about preparing the organization to accept that change is necessary. This involves breaking down the existing status quo before you can build up a new way of operating. The motivation for change must be generated before change can occur. This phase is critical for overcoming the inertia and dismantling the existing mindset that is resistant to change.

- **Creating Awareness:** Raising awareness about the need for change and communicating the reasons for it. This often involves presenting data, trends, or external pressures that highlight the necessity of change.
- **Addressing Concerns:** Dealing with employees' fears and uncertainties by communicating the benefits of change and how it will positively impact the organization.
- **Building Support:** Engaging key stakeholders and forming a coalition that supports the change initiative.

2. Changing (or Transition)

Once the organization is unfrozen, it can move to the Changing phase. This is the stage where the actual transition or transformation occurs. People begin to learn the new behaviors, processes, and ways of thinking.

- **Implementing New Practices:** Introducing new processes, systems, or structures. This could involve training programs, pilot projects, or incremental changes.
- **Empowering Employees:** Providing the necessary support and resources to employees to adopt the new ways of working. This includes clear communication, training, and access to information.
- **Encouraging Innovation:** Creating an environment where employees feel free to experiment and innovate within the new framework.

3. Refreezing

The Refreezing stage is about solidifying the new state after the change. This phase is crucial to ensure that the change is sustained over time and becomes integrated into the organizational culture.

- **Reinforcing Changes:** Implementing measures to reinforce the new behaviors and processes. This can include policies, procedures, and performance metrics aligned with the new way of working.
- **Celebrating Successes:** Recognizing and celebrating the successes achieved through the change to build morale and commitment.
- **Institutionalizing Change:** Embedding the changes into the organization's culture, ensuring that they are consistently practiced and become the new norm.

• Application in Pharmaceutical Manufacturing

Lewin's model is particularly relevant in the pharmaceutical manufacturing industry due to the sector's strict regulatory environment and the constant need for innovation and compliance with new standards.

1. Unfreezing in Pharmaceutical Manufacturing

In a pharmaceutical company, the Unfreezing stage might involve recognizing the need for change due to new regulatory requirements or advancements in technology. For instance, a company might need to upgrade its manufacturing processes to comply with new Good Manufacturing Practices (GMP) standards.

Awareness Creation: Communicating the regulatory changes and the potential risks of non-compliance to the entire organization.

Engagement: Involving regulatory experts and quality assurance teams to lead the change initiative.
Support Building: Forming a cross-functional team to champion the change, including representatives from production, quality control, and R&D.

2. Changing in Pharmaceutical Manufacturing

During the Changing phase, the company implements the new processes or technologies required to meet the updated GMP standards.

Training Programs: Conducting comprehensive training sessions for staff to familiarize them with new procedures and equipment.

Pilot Testing: Running pilot projects to test the new processes on a smaller scale before full implementation.

Feedback Mechanism: Establishing feedback loops to identify issues and make necessary adjustments during the transition.

3. Refreezing in Pharmaceutical Manufacturing

In the Refreezing stage, the company ensures that the new processes are firmly established and consistently followed.

- Documentation: Updating all standard operating procedures (SOPs) and documentation to reflect the new processes.
- Audits and Reviews: Regularly conducting internal audits and reviews to ensure compliance with the new standards.
- Cultural Integration: Promoting a culture of continuous improvement and compliance through ongoing training and communication.

Advantages and Challenges of Lewin's Model, according to Hiatt & Creasy (2012),

- Simplicity: The model's straightforward three-stage process is easy to understand and apply.
- Focus on Preparation and Reinforcement: Emphasizes the importance of preparing for change and ensuring its sustainability.
- Flexibility: Can be adapted to various types of organizational changes.

1. Challenges:

- Resistance: The Unfreezing stage can be met with significant resistance if not managed effectively.
- Time-Consuming: The process can be time-consuming, particularly in complex or large-scale changes.

- Rigidity: Some critics argue that the model is too linear and does not account for the dynamic nature of organizational change.

Conclusion

Lewin's Change Management Model remains a valuable tool for managing organizational change, particularly in industries like pharmaceutical manufacturing where adherence to regulatory standards and continuous improvement are critical. By focusing on unfreezing existing practices, implementing new changes, and refreezing these changes into the organizational culture, companies can navigate the complexities of change more effectively. (Hussain, et al., 2018)

2.3.2. Kotter's 8-Step Change Model

Kotter's 8-Step Change Model, developed by John P. Kotter, is a robust and practical framework designed to help organizations implement successful change. First introduced in Kotter's 1996 book "Leading Change," the model outlines eight essential steps for managing change effectively, emphasizing the importance of creating a sense of urgency and building momentum throughout the change process. This model is particularly valuable in environments like pharmaceutical manufacturing, where change is often complex and involves multiple stakeholders. (Kotter J. 1996).

Kotter's 8-Step Change Model

1. Create a Sense of Urgency

The first step in Kotter's model is to create a sense of urgency about the need for change. This involves communicating the reasons for change and highlighting the potential risks of not changing.

- Application: In pharmaceutical manufacturing, urgency might be created by emphasizing the risks of non-compliance with new regulatory standards or the competitive advantage of adopting new technology. (Kotter J. 1996)
- Techniques: Conducting a SWOT analysis, presenting market data, or sharing customer feedback to illustrate the need for immediate action. (Kotter J. 1996)

2. Form a Powerful Coalition

Building a guiding coalition involves assembling a group of influential individuals who support the change initiative. This coalition should have enough power and credibility to lead the change effort.

- Application: In a pharmaceutical company, this coalition might include executives, department heads, and key influencers from R&D, manufacturing, and quality control.
- Techniques: Identifying and recruiting individuals with strong leadership skills and commitment to the change initiative. (Kotter J. 1996)

3. Create a Vision for Change

A clear vision helps to direct the change effort and provides a sense of direction. The vision should be concise, understandable, and inspirational. (Kotter, J. 2008)

- Application: For a pharmaceutical firm, the vision could be related to becoming a leader in compliance with the latest GMP standards or pioneering new drug development technologies.
- Techniques: Developing a vision statement and supporting it with strategic goals and objectives.

4. Communicate the Vision

Effective communication of the vision is crucial to gain buy-in from all stakeholders. The vision should be communicated frequently and through multiple channels to ensure it reaches everyone in the organization. (Kotter, J. 2008)

- Application: Use company meetings, newsletters, emails, and informal conversations to communicate the vision and the benefits of the change.
- Techniques: Leveraging different communication platforms, creating informative and engaging content, and encouraging open dialogue.

5. Remove Obstacles

Identifying and removing obstacles that impede the change process is critical for maintaining momentum. This might involve changing systems, structures, or attitudes that undermine the vision. (Kotter, J. 2008)

- Application: In pharmaceutical manufacturing, obstacles could include outdated SOPs, resistance from employees, or insufficient resources.
- Techniques: Conducting root cause analysis, revising policies, and providing necessary training and resources.

6. Create Short-Term Wins

Generating short-term wins helps to build momentum and demonstrate the benefits of change. These wins should be visible, unambiguous, and clearly linked to the change effort. (Kotter, J. 2008)

- Application: Achieving quick wins in a pharmaceutical company might involve successfully completing a pilot project or receiving initial regulatory approval for a new process.
- Techniques: Setting achievable short-term goals, celebrating successes, and communicating these wins to the entire organization.

7. Build on the Change

Consolidating gains and producing more change involves leveraging the credibility of short-term wins to tackle larger projects. This step ensures that change initiatives are built upon and expanded. (Kotter, J. 2008)

- Application: After initial successes, a pharmaceutical company might expand the new processes to other departments or scale up new technologies across multiple production lines.
- Techniques: Using the momentum from early wins to drive further changes, ensuring continuous improvement, and avoiding complacency.

8. Anchor the Changes in Corporate Culture

Finally, to ensure the sustainability of changes, they must be embedded in the organizational culture. This involves making the new ways of working part of the company's core values and practices. (Kotter, J. 2008)

- Application: In pharmaceutical manufacturing, this might mean integrating new compliance practices into the company's culture and rewarding adherence to these new standards.
- Techniques: Continuous communication about the benefits of the change, integrating changes into performance appraisals and training programs, and ensuring leadership consistently endorses and exemplifies the new ways of working.

Advantages and Challenges of Kotter's Model,

1. Advantages:

- Structured Approach: Provides a clear and structured pathway for implementing change, which can be particularly useful in complex environments like pharmaceutical manufacturing.
- Focus on People: Emphasizes the importance of buy-in from all levels of the organization, addressing both the emotional and practical aspects of change.
- Sustainability: Encourages embedding changes into the corporate culture, which helps ensure long-term success.

2. Challenges:

- Time-Consuming: The process can be lengthy, requiring sustained effort over time.
- Resource-Intensive: Successful implementation requires significant investment in terms of time, money, and human resources.
- Potential Resistance: Despite the structured approach, there may still be resistance to change that needs to be carefully managed.

- In the highly regulated and innovation-driven environment of pharmaceutical manufacturing, Kotter's model provides a comprehensive approach to managing change. Here's a practical example of its application:

2.3.3. ADKAR Model

The ADKAR Model is a goal-oriented change management framework that guides individuals and organizations through the change process. Developed by Jeff Hiatt, founder of Prosci, the ADKAR Model focuses on the human side of change, emphasizing the individual's journey through the change process. The acronym ADKAR stands for Awareness, Desire, Knowledge, Ability, and Reinforcement, which represent the five key outcomes an individual needs to achieve for successful change. This model is particularly relevant in industries such as pharmaceutical manufacturing, where changes can be complex and highly regulated.

The ADKAR Model Components

1. Awareness of the Need for Change

Awareness involves understanding why change is necessary. It is the first step in the ADKAR Model, emphasizing the importance of recognizing the need for change to create a foundation for the transition.

- **Application in Pharmaceutical Manufacturing:** For instance, awareness might be created around the need to comply with new regulatory standards or to adopt advanced manufacturing technologies to stay competitive.
- **Techniques:** Using communication strategies like meetings, newsletters, and presentations to inform employees about the reasons behind the change. Highlighting the risks of not changing, such as potential non-compliance fines or loss of market share.

2. Desire to Participate and Support the Change

Desire represents the individual's motivation and willingness to engage in the change process. It involves addressing personal and organizational benefits to encourage participation and support.

- **Application in Pharmaceutical Manufacturing:** Employees might need to be motivated to support the adoption of a new quality control system by understanding how it will improve product safety and job security.

- **Techniques:** Engaging employees through workshops and one-on-one discussions to understand their concerns and motivations. Providing incentives and demonstrating the benefits of the change.

3. Knowledge on How to Change

Knowledge encompasses the information, training, and education necessary to know how to change. It includes understanding what to do, how to do it, and how the change will affect the organization.

- **Application in Pharmaceutical Manufacturing:** Knowledge might involve training on new manufacturing processes, updated SOPs, or regulatory requirements.
- **Techniques:** Developing comprehensive training programs, e-learning modules, and hands-on workshops to ensure all employees understand the new procedures and technologies.

4. Ability to Implement Desired Skills and Behaviors

Ability is the capability to implement the required skills and behaviors. It focuses on translating knowledge into practice and overcoming obstacles that may hinder the change process.

- **Application in Pharmaceutical Manufacturing:** Ensuring that employees can effectively use new equipment or adhere to updated protocols in daily operations.
- **Techniques:** Providing ongoing support, coaching, and resources. Conducting practice sessions and simulations to build confidence and competence.

5. Reinforcement to Sustain the Change

Reinforcement involves actions and mechanisms to sustain the change. It ensures that changes are maintained and integrated into the organizational culture over the long term.

- **Application in Pharmaceutical Manufacturing:** Reinforcing the importance of new compliance standards through regular audits, feedback loops, and continuous improvement initiatives.
- **Techniques:** Recognizing and rewarding adherence to new practices, conducting regular reviews, and integrating the changes into performance appraisals and organizational policies.

Advantages of the ADKAR Model

1. **Individual Focus:** By addressing individual needs and responses to change, the ADKAR Model ensures that each person in the organization is considered, increasing the likelihood of successful change.
2. **Clear Framework:** The model provides a clear and structured approach to change, making it easier to plan and manage the change process.
3. **Scalable:** ADKAR can be applied to changes of any size, from small process improvements to large-scale organizational transformations.

Challenges of the ADKAR Model

1. **Time-Intensive:** Implementing each step thoroughly can be time-consuming, requiring sustained effort and resources.
2. **Requires Buy-In:** The success of the ADKAR Model relies heavily on getting buy-in from all levels of the organization, which can be challenging to achieve.
3. **Continuous Monitoring:** Ensuring that changes are sustained requires continuous monitoring and reinforcement, which can be resource-intensive.

2.4. Conceptual framework

According to Palmer I, Donford, R., & Buchanan, D. (2016), a researcher needs to consider different potential independent variables to have a broader perspective. For this research study, several potential independent variables are considered. These independent variables can encompass various aspects of change management practices, organizational factors, and contextual factors that may influence project success.

1. Change Management Strategies:

- Implementation of Change Management Models,
- Internal Stakeholders awareness, Engagement and Participation,
- Stakeholder Communication Strategies,

2. Organizational Factors:

- Organizational Culture and environment,

- Organizational Structure and Hierarchical Levels,
- Resources Allocation (financial, human, technological)
- Project Management Practices

3. Contextual Factors:

- Regulatory Environment (e.g., FDA regulations, Good Manufacturing Practices)
- Technological Advances and Innovation
- Market Dynamics and Competition
- External Stakeholder Influence (e.g., customers, suppliers, regulatory agencies)

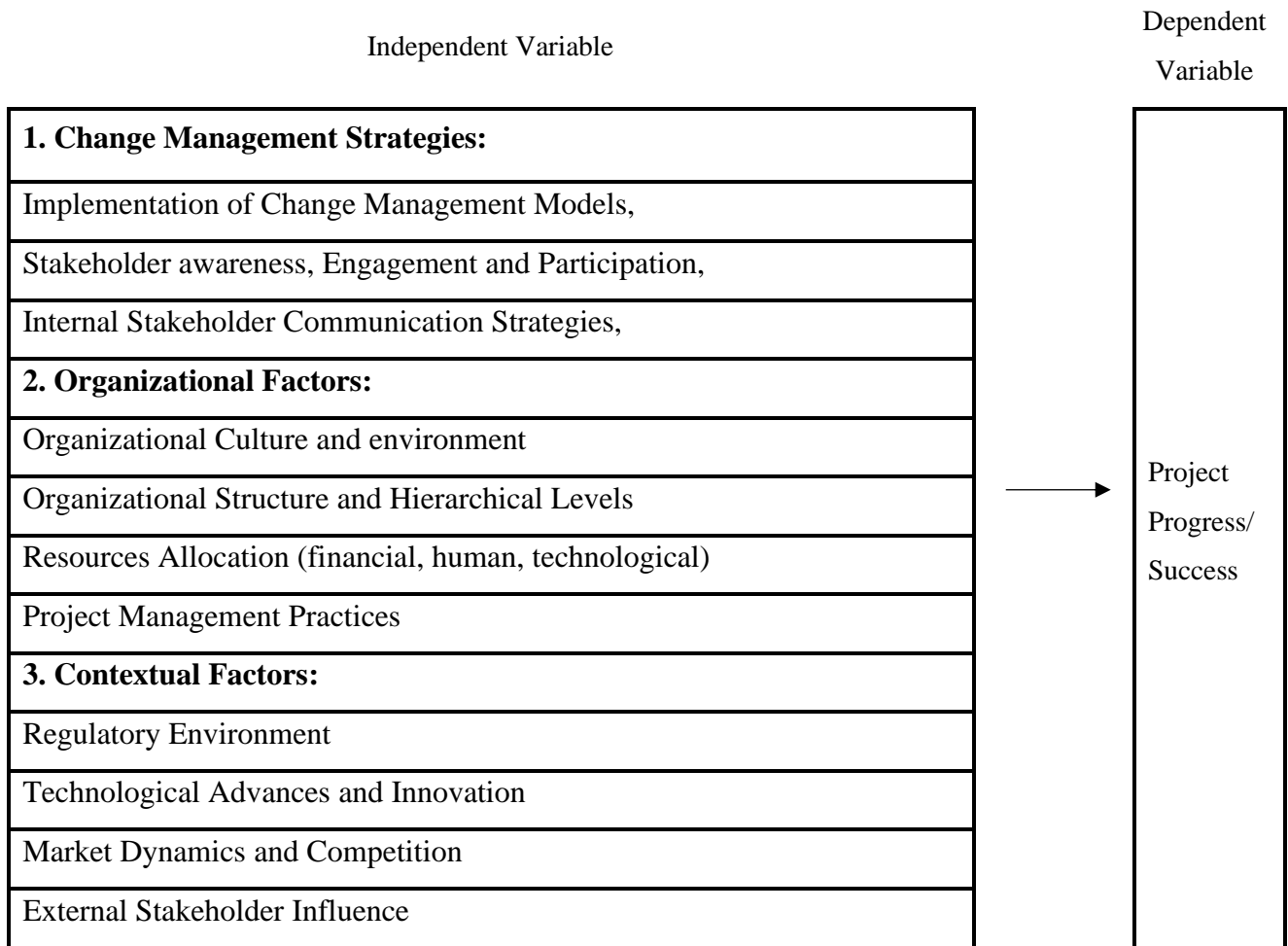


Figure 1 Conceptual Framework

2.5. Research Hypothesis

Based on the discussions in the previous sections the following hypotheses are formulated;

1. **H1:** - Change Management Strategies have significant and positive effect on project success.
2. **H2:** - Organizational Factors have significant and positive effect on project success.
3. **H3:** - Contextual Factors have significant and positive effect on project success.

CHAPTER THREE: RESEARCH METHEDODOLOGY

This chapter involves the design and approach of the study performed to study the relation between variables. Then the population and sample size used for the data analysis; data source and collection method; model specification; analysis of data; reliability check; validity check; and ethical consideration of the project.

3.1. Research Setting

The main focus area of the study is change management. The data for this research is collected from people involved in the trust pharmaceutical manufacturing factory both at the head office and project. It involves professional workers of the project who are currently working at the site; including the contractor and the consultant.

3.2. Research Design

This research includes descriptive and explanatory research design. In general, research studies can be descriptive, exploratory, or explanatory. Descriptive research is appropriate when asked, and the purpose of the research is not to establish a relationship. More descriptive studies include the evaluation of behavior, theories, populations, events, and methods. Explanatory research is used to examine the relationship between variables (Creswell, 2009). Exploratory research is used when the subject is a new and unexplored research topic.

Descriptive research always works as research that uses data collected to analyze the performance of the selected company, here in this case Trust Pharmaceutical Manufacturing, and Explanatory research designed to test the hypothesis and see the relationship between the change management and project success. Therefore, descriptive and explanatory research designs were used in this study, The research employs a case study design to delve deeply into Trust Pharmaceutical Manufacturing PLC's practices in change management. This approach allows for a detailed examination of real-world scenarios, processes, challenges, and strategies within the specific context of the company.

3.3. Research approach

The research uses a combination of quantitative and qualitative research. According to Creswell (2014), combined use provides a more comprehensive understanding of the research question and interprets or structures research findings by triangulating different data sources and sources. Quantitative research is an objective measure of a problem that seeks facts and tries to establish relationships through statistical tools. Creswell (2014) defined quantitative research as testing

objective hypotheses by examining the relationship between variables. These variables are usually measurable, so statistical programs can be used to analyze the data. Qualitative research is the "subjective" assessment of a problem (called personality, different, things, or problems) in the form of a feeling, opinion, opinion, or behavior. Kothari (2004) pointed out that qualitative research is about events that occur in the natural environment. This allows researchers to create detailed information about individuals or organizations. Therefore, this research used both quantitative and qualitative research.

3.3.1. Population of the Study and Sampling Technique

The target population for this report included all the employees of the company like the project managers, QA/QC Head, Plant Manager, Production head, employee representatives, and other support personnel responsible for the planning, engineering, supply chain, implementation, management, and other service of the pharmaceutical manufacturing company, then the external consultant, Construction contractor and the Development bank of Ethiopia that funds the project on the ground. All processes have been successfully completed and the population are 45 people.

3.3.2. Sampling Determination

According to Kothari (2004), it can be assumed that in such questions, when all items are covered, there is no chance of remaining and achieving the most accurate results. Even the small amount of bias in these studies is greater than in many other studies. In addition, there is no way to check for lack or extent other than re-examination or review using samples. However, this type of research takes a lot of time, money and effort. Therefore, when the content of the question is broad, this approach may be difficult to adopt due to the resources involved (Kothri, 2004). Since the total target population is relatively smaller there is no wastage of time, energy and cost if population as a whole is considered. Thus, the researcher took all 45 target populations for the study as sample.

3.4. Data source and collection

There are two data sources. These are primary and secondary data. The primary data is an original source of data because it is being gathered for the first time. It is gathered through observation or direct interaction with respondents; examples include questionnaires, interviews, and observations. Secondary data, on the other hand, is information that has already been gathered by another party. It is gathered through publications such as books, magazines, reports, and historical documents. (Kothri, 2004).

The researcher used both sources of data in order to achieve the objectives of this research. In this project the primary data is collected through structured questionnaire responses of respondents. The questionnaire is prepared using Google form and the produced link is sent to all respondents using telegram. This helps to collect data automatically.

The response is collected on the researcher’s Google account automatically when respondents submit their answers on their phone. This helps the researcher to collect data easily and in short period of time. This also make it easier for the respondents, as they use their phone to reply to the questionnaire. Secondary data is collected from numerous books, articles, journals, and contractual documents.

3.5. Validity

Validity, the most important criterion, describes how closely an instrument measures what it is intended to measure. To put it another way, the degree to which differences detected by a measuring tool accurately represent differences among the subjects of the test is known as validity (Kothari, 2004). The study uses content validity. To enhance content validity, the research uses a tested questionnaire. It adapts the questionnaire and variables from (Waries et al., 2022) and (Khan et al., 2021). Therefore, the variables and the questionnaire are well tested. Reliability testing is a crucial additional test for accurate measurement.

Cronbach’s Alpha	Internal Consistency
Above 0.9	Excellent
0.8-0.9	Good
0.7-0.8	Acceptable
0.6-0.7	Questionable
0.5-0.6	Poor
Less than 0.5	unacceptable

Table 1 Cronbach’s Alpha ranges.

If a measuring device yields repeatable results, it is reliable (Kothari, 2004). Reliability measure of the variables for the respondents will be measured by Cronbach ‘s alpha coefficient. If the alpha values for each variable are above 0.7 it indicates that the designed instrument is acceptable. In this

study all variables are tested for reliability and the result is above 0.7, which ensures that the measuring instrument is reliable.

No	Variable	Cronbach Alpha	No of Items
1	Change Management Strategies	0.741	5
2	Organizational Factors regarding Change management.	0.703	8
3	Contextual Factors	0.750	4
4	The critical success factors for effective change	0.739	6
5	Challenges and problems faced by the company,	0.744	5
6	Project Success/ Evaluation of the project progress	0.710	8

Table 2 Reliability analysis for each dimension.

3.6. Analysis of data

Data can be analyzed in several ways. The data collected from the respondents on the researcher's Google account is exported in Microsoft excel file format for analysis. For analyzing the primary quantitative data collected from the questionnaire the researcher generates out puts using statistical package for social students (SPSS) computer software. Descriptive analysis is used to analysis responses of respondents on each variable. Correlation is used to analyze the relationship among each variable. And Regression is used to analyze the impact of the independent variable on the dependent variable. Regression is used to determine statistical relationship between variables.

3.7. Model Specification

Regression is the determination of the relationship between two or more variables (Kothari 2004). This regression analysis is used to understand how well the independent variables explain the variance of the variables. In this study, research hypotheses were tested using regression analysis because this method was found to be the most appropriate and more reliable than the correlation model. It differs from the model because of the complexity of the model and the information contained in it. Regression was performed on properties specific to eleven control variables (independent variable) and project success (dependent variable). The regression model is as follow.

$$Y=a+b_1X_1+ b_2X_2+ b_3X_3+E$$

Y – Project Success

X1 - Change Management Strategies,

X2 - Organizational Factors,

X3 - Contextual Factors,

E - Error

3.8. Ethical consideration

The researcher mentions all secondary sources of data and the resources are cited correctly. In the questionnaire, the cover letter explains the purpose of the questionnaire. As well as, all participants will be informed that participation is voluntary. The information collected will be kept confidential. People's names will not be included in the confidentiality. The respondent's reply will not be used for any other purpose other than this research.

Additionally, it has been evident that the researcher also has ethical obligations to the scientific community on how data is analyzed and reported in the study. Accordingly, genuine information has been forwarded not to mislead the scientific community.

CHAPTER FOUR: RESULT AND DISCUSSION

4.1.Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The study findings and discussions are presented on the role of change management on achieving project success of a pharmaceutical manufacturing factory.

It includes the demographical distribution of the respondents, descriptive analysis, correlation of the variables, and regression analysis. The details are presented here below.

4.2.Response Rate

The researcher distributed 45 questionnaires to all the concerned internal and external stakeholders. All the 45 respondents fully replied to the questionnaire appropriately. Therefore, a total 45 responses are used for the analysis. This is equal to 100% response rate, so it is acceptable to proceed to the analysis.

Table 3. Response Rate

Response	Frequency	Percent (%)
Responses	45	100
Non-responses	0	0
Total	45	100

Source: Own Survey, 2023/24

4.3. Respondents Demographic Data

The first part of the questionnaire consists of items about the demographic information of the respondents. It covers the personal data of respondents, such as gender, academic level and year of service. The following tables depicted for each demographic characteristic of the respondents

Table 4: General information of the respondents.

Description		Frequency	Percent (%)
Gender	Male	38.0	84.4
	Female	7.0	15.6
Age	Below 30	3.0	6.67
	31 – 40	19.0	42.22
	41 – 50	15.0	33.33
	Above 51	8	17.33
Educational background	Diploma		
	Degree	17	37.8
	Masters (MSc, MA)	28	62.2
	PhD		
Work Experience	Below 5 years	6.0	13.33
	5 – 10 years	18.0	40.00
	Above 10 years	21.0	46.67
Work Place	Trust Pharmaceutical Manufacturing	29.0	64.44
	Consultant	6.0	13.33
	Construction Contractor	4.0	8.89
	Development Bank of Ethiopia	6.0	13.33
	Other		
Position in Work Place	Managerial Position	7.0	15.56
	Engineering Department	16.0	35.56
	Administrative Staff	18.0	40.00
	Other	4.0	8.89

Source: Survey Analysis result, 2023

4.3.1. Gender of Respondents

The demographic data for gender shows that out of the 45 respondents there were 38 males and 7 females. The figure shows the male respondents formed majority of the target population with a percentage of 84.44 %, while female respondents were representing 15.66%.

4.3.2. Age of Respondents

The table above shows 3(6.67%) of the respondents were below 30 years old, 19 (42.22%) were between 31-40 years old, 15 (33.33%) were 41-50 years old, and 8 (17.33%) above 51 years old. This implies the majority of the respondents were in the range of 31 - 40 years old.

4.3.3. Educational background of Respondents

As from the table above 17 (37.8%) of the respondents were bachelor's degree holders, 28 (62.2%) of the respondents were masters' holders. This implies that majority of the respondent were masters' holders.

4.3.4. Work Experience of Respondents

As observed from the table above, 6 (13.3%) of the respondents worked below 5 years, 18 (40.0%) of the employees worked between 5-10 years, 21 (46.6%) of the employees worked above 10 years. The majority of the respondents worked above 10 years of work experience.

4.3.5. Work Place of Respondents

29 (64.4%) of the respondents works in Trust Pharmaceutical Manufacturing PLC, 6 (13.3%) of the respondent worked in different consulting firms that are in service with Trust manufacturing, 4 (8.89%) of the respondent worked in the contractor's firm and 6 (13.33) works in development bank of Ethiopia.

4.3.6. Position in Work Place of Respondents

As observed from the table above, 7 (15.56%) of the respondents worked on Management position, 16 (35.56%) of the employees worked in Engineering department, 18 (40.0%) of the employees worked in administrative department. The majority of the respondents worked in administrative department.

4.4. Descriptive Statistics

The data collected in this section are analyzed using various data analysis tools such as mean, standard deviation, frequency and percentage. Descriptive statistics for each variable were measured on a 5-point Likert scale ("1" "strongly disagree" and "5" "strongly agree").

According to Zaidaton and Bagheri (2009), a total score between 4.21-5.00 is considered Good Agreement (SA) if the respondent scores between 3, and 3.41-4.20 indicates that they agree (A), the mean score of the respondents between 2.61-3.40 is considered neutral (N), and the mean score of the respondents is 1.81-2. A score of 1-1.80 indicates that they do not agree.

Table 5 Scales assigned for mean values

Mean score range

Mean range	Response Option
1 to 1.80	Strongly disagree
1.8 to 2.6	Disagree
2.6 to 3.4	Neutral
3.4 to 4.20	Agree
4.2 to 5.00	Strongly Agree

Source: (Al-Sayaad et al., 2006, as cited by Alemu, 2021).

Additionally, the standard deviation measures the dispersion of given data indicates how close to the average the data is clustered. The smaller the standard deviation the better consistent response or reaction is.

Standard deviation that is less than plus or minus 2 is considered to represent measurements that are closer to the mean or average value (J. Rumsey, 2021). Responses of the respondents for the questions of the variables are analyzed using descriptive analysis. The result is prepared in tables as follows:

4.4.1. Descriptive analysis of Change Management Strategies

Statistics,

Table 6 Change Management Strategies

No	Question	Strongly disagree (1)		Disagree (2)		Neutral (3)		Agree (4)		Strongly agree (5)		Mean	Standard Deviation
		Freq	Per (%)	Freq	Per (%)	Freq	Perc (%)	Freq	Perc (%)	Freq	Perc (%)		
1	The company managers had the right amount of awareness about change and change management and were well aware of changes that could occur in any stage of life cycle of the project.					5.00	11.11	12.00	26.67	28.00	62.22	4.51	0.472
2	The company managers have Implemented the right Change Management Models that fits the project and the company.					11.00	24.44	16.00	35.56	18.00	40.00	4.16	0.620
3	The Stakeholder supports the change and the change management by giving consistent attention.					8.00	17.78	5.00	11.11	32.00	71.11	4.53	0.602
4	The stakeholders were well engaged and Participates in the change management process.					6.00	13.33	9.00	20.00	30.00	66.67	4.53	0.516
5	There was a well-established Internal Stakeholders Communication Strategy that helps discuss the change and change management.					9.00	20.00	7.00	15.56	29.00	64.44	4.44	0.647
Avg											4.44	0.57	

Source: Survey analysis result, 2024

The mean value of the table shows level of agreement of the respondents towards the change management strategies. From the mean value of the responses, it can be seen that the respondents

mostly agree about the level of awareness, the type of change management model implemented, the support system the stakeholders had towards the change management and the communication channel. The table summarizes that the mean of the responses, which is equal to 4.44, falls to the fifth category which ranges from 4.1 to 5.0. Additionally, the standard deviation of this variable is equal to 0.57, which is lower than 2. Standard deviation that is less than plus or minus 2 is considered to represent measurements that are closer to the mean or average value (J. Rumsey, 2021). The result implies that there is a strong change management strategy.

4.4.2. Descriptive analysis of Organizational Factors regarding Change management

Statistics,

Table 7 Organizational Factors regarding Change management

No	Question	Strongly disagree (1)		Disagree (2)		Neutral (3)		Agree (4)		Strongly agree (5)		Mean	Standard Deviation
		Freq	Per (%)	Freq	Per (%)	Freq	Perc (%)	Freq	Perc (%)	Freq	Perc (%)		
1	The organizational Culture and environment of the company supports change and change management					1.0	2.2	32.0	71.1	12.0	26.7	4.24	0.229
2	Organizational Structure and Hierarchical Levels are well defined and helps the implementations of the change management.					3.0	6.7	24.0	53.3	18.0	40.0	4.33	0.355
3	The company has created an awareness among the staff that change brings an advancement for the success of the project.					6.0	13.3	11.0	24.4	28.0	62.2	4.49	0.516
4	The Project Management Practices implemented in the company supports the change management system.					-	-	13.0	28.9	32.0	71.1	4.71	0.205
5	The company has a change management methodology that is easy to apply at any stage of the project.					10.0	22.2	13.0	28.9	22.0	48.9	4.27	0.640

6	The company has a change management methodology that is easy to implement across multiple changes. (This here is only applied to a specific project).					1.0	2.2	21.0	46.7	23.0	51.1	4.49	0.290
7	All the required and necessary resources were allocated for the change management process in the company.					11.0	24.4	24.0	53.3	10.0	22.2	3.98	0.466
8	In the company, representatives of the change management team are from all departments affected by the change.					17.0	37.8	24.0	53.3	4.0	8.9	3.71	0.383
											Avg	4.28	0.39

Source: Survey analysis result, 2024

The mean value of the table shows level of agreement of the respondents towards Organizational Factors regarding Change management. From the mean value of the responses, it can be seen that the respondents mostly agree about the organizational Culture and environment of the company, Organizational Structure and Hierarchical Levels being well defined and the other organizational factors. The table summarizes that the mean of the responses, which is equal to 4.28, falls to the fifth category which ranges from 4.1 to 5.0. Additionally, the standard deviation of this variable is equal to 0.39, which is lower than 2. Standard deviation that is less than plus or minus 2 is considered to represent measurements that are closer to the mean or average value (J. Rumsey, 2021). The result implies that there is a strong change management strategy.

4.4.3. Descriptive analysis of Contextual Factors

Statistics,

Table 8 Contextual Factors.

No	Question	Strongly disagree (1)		Disagree (2)		Neutral (3)		Agree (4)		Strongly agree (5)		Mean	Standard Deviation
		Freq	Per (%)	Freq	Per (%)	Freq	Perc (%)	Freq	Perc (%)	Freq	Perc (%)		
1	Regulatory rules of the pharmaceutical industry have been changing more often than expected leading to changes in scope, time and budget of the project.				-	2.0	4.4	5.0	11.1	38.0	84.4	4.80	0.24
2	Technological Advances and Innovation have been changing more often than expected leading to changes in scope, time and budget of the project.				-	1.0	2.2	8.0	17.8	36.0	80.0	4.78	0.22
3	Market Dynamics and Competition in the pharmaceutical manufacturing industry has a significant role for the need of change management.				-	9.0	20.0	12.0	26.7	24.0	53.3	4.33	0.62
4	External Stakeholder Influence has a significant role for the need and implementation of the change management.			4.00	8.9	11.0	24.4	21.0	46.7	9.0	20.0	3.78	0.7
Avg											4.42	0.44	

Source: Survey analysis result, 2024

The mean value of the table shows level of agreement of the respondents towards Contextual Factors like regulatory rules, technological advancement, market dynamic and external stakeholder's influence. From the mean value of the responses, it can be seen that the respondents mostly agree about the organizational Culture and environment of the company, Organizational Structure and Hierarchical Levels being well defined and the other organizational factors. The table summarizes that the mean of the responses, which is equal to 4.42, falls to the fifth category which ranges from 4.1 to 5.0. Additionally, the standard deviation of this variable is equal to 0.44, which is lower than

2. Standard deviation that is less than plus or minus 2 is considered to represent measurements that are closer to the mean or average value (J. Rumsey, 2021).

4.4.4. Descriptive analysis of critical success factors for effective change management.

Statistics,

Table 9 Critical success factors for effective change management.

No	Question	Strongly disagree (1)		Disagree (2)		Neutral (3)		Agree (4)		Strongly agree (5)		Mean	Standard Deviation
		Freq	Per (%)	Freq	Per (%)	Freq	Perc (%)	Freq	Perc (%)	Freq	Perc (%)		
1	Top management awareness and support about the purpose and necessity of the change management.					2.0	4.4	12.0	26.7	31.0	68.9	4.64	0.31
2	Open and smooth communication line between top managers, employees and other stakeholders,					1.0	2.2	17.0	37.8	27.0	60.0	4.58	0.29
3	Training towards employees to enhance their knowledge regarding the change management process,					4.0	8.9	6.0	13.3	35.0	77.8	4.69	0.39
4	Alignment of the change management with the organizational goals,					1.0	2.2	3.0	6.7	41.0	91.1	4.89	0.14
5	Allocation of adequate resources towards the planning and execution stage of change management life cycle.,					12.0	26.7	16.0	35.6	17.0	37.8	4.11	0.63
6	Well defined and structured change management strategy is in place,						-	3.0	6.7	42.0	93.3	4.93	0.06
Avg											4.64	0.30	

Source: Survey analysis result, 2024

The mean value of the table shows level of agreement of the respondents towards Critical success factors for effective change management, it can be seen that the respondents mostly agree about the Critical success factors for effective change management. The table summarizes that the mean of the responses, which is equal to 4.64, falls to the fifth category which ranges from 4.1 to 5.0. Additionally, the standard deviation of this variable is equal to 0.3, which is lower than 2. Standard deviation that is less than plus or minus 2 is considered to represent measurements that are closer to the mean or average value (J. Rumsey, 2021).

4.4.5. Descriptive analysis of Challenges and problems faced by the company during implementing change management.

Statistics,

Table 10 Challenges and problems faced by the company during implementing change management.

No	Question	Strongly disagree (1)		Disagree (2)		Neutral (3)		Agree (4)		Strongly agree (5)		Mean	Standard Deviation
		Freq	Per (%)	Freq	Per (%)	Freq	Perc (%)	Freq	Perc (%)	Freq	Perc (%)		
1	Insufficient Training was a major problem in change management implementation	23.00	51.1	22.0	48.9		-				-	2.49	0.24
2	Poor Communication was a major problem in change management implementation	24.00	53.3	20.0	44.4	1.00	2.2				-	2.42	0.29
3	Lack of Leadership Support was a major problem in change management implementation	19.00	42.2	24.0	53.3	2.00	4.4				-	2.49	0.32
4	Inadequate Resources was a major problem in change management implementation	16.00	35.6	17.0	37.8	12.00	26.7				-	2.11	0.61
5	Misalignment between Change Management and organizational goal was a major problem in change management implementation	9.00	20.0	20.0	44.4	16.00	35.6				-	2.09	0.53
											Avg	2.32	0.40

Source: Survey analysis result, 2024

The mean value of the table shows level of agreement of the respondents towards Challenges and problems faced by the company during implementing change management, it can be seen that the respondents mostly disagree about the Challenges and problems stated above. The table summarizes

that the mean of the responses, which is equal to 2.32, falls to the third category which ranges from 1.8 to 2.6. Additionally, the standard deviation of this variable is equal to 0.4, which is lower than 2. Standard deviation that is less than plus or minus 2 is considered to represent measurements that are closer to the mean or average value (J. Rumsey, 2021).

4.4.6. Descriptive analysis of Project Success/ Evaluation of the project progress.

Statistics,

Table 11 Project Success/ Evaluation of the project progress.

No	Question	Strongly disagree (1)		Disagree (2)		Neutral (3)		Agree (4)		Strongly agree (5)		Mean	Standard Deviation
		Freq	Per (%)	Freq	Per (%)	Freq	Perc (%)	Freq	Perc (%)	Freq	Perc (%)		
1	The project is being completed on the time intended as scheduled.	32.00	71.1	9.00	20.0	4.0	8.9	-	-	-	-	1.38	0.41
2	The project is being completed according to the budget allocated.	28.00	62.2	11.00	24.4	6.0	13.3	-	-	-	-	1.51	0.51
3	The outcomes of the project are likely to be as planned.	-	-	-	-	-	-	34.0	75.6	11.0	24.4	4.24	0.18
4	The outcomes of the project will directly benefit the intended end users, through increasing efficiency.	-	-	-	-	-	-	29.0	64.4	16.0	35.6	4.36	0.22
5	Stakeholders are satisfied with the progress by which the project is being implemented.	5.00	11.1	28.00	62.2	12.0	26.7	-	-	-	-	2.16	0.35
6	Project team members are satisfied with the process by which the project is being implemented.	2.00	4.4	41.00	91.1	2.0	4.4	-	-	-	-	2.00	0.09
7	The company identify metrics that adequately demonstrate adoption of the desired change.	11.00	24.4	28.00	62.2	6.0	13.3	-	-	-	-	1.89	0.37
8	Based on the results of the assessment, the change management team takes a corrective action.	3.00	6.7	6.00	13.3	36.0	80.0	-	-	-	-	2.73	0.33

Avg	2.53	0.31
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Source: Survey analysis result, 2024

The mean value of the table shows level of agreement of the respondents towards Challenges and problems faced by the company during implementing change management, it can be seen that the respondents mostly disagree about the Challenges and problems. The table summarizes that the mean of the responses, which is equal to 2.53, falls to the third category which ranges from 1.8 to 2.6. Additionally, the standard deviation of this variable is equal to 0.31, which is lower than 2. Standard deviation that is less than plus or minus 2 is considered to represent measurements that are closer to the mean or average value (J. Rumsey, 2021).

4.5. Correlation Analysis

Correlation analysis was performed to examine the relationships. Pearson's product-moment correlation coefficient is a statistic that shows how much two variables are related to each other. The sign of the correlation coefficient (+ or -) indicates a relationship between -1.00 and +1.00. Variables can be positively or negatively related. Correlation shows that there is a direct relationship between the two variables. A negative correlation indicates a negative relationship between the two variables (Ruud et al. 2012). The table below clearly shows whether the relationship between the two variables is negative, low, moderate, significant or very strong.

Table 12 Correlation Coefficient

Correlation Coefficient	Strength of correlation
From 0.01 up to 0.09	Negligible association
From 0.10 up to 0.29	Low association
From 0.30 up to 0.49	Moderate association
From 0.50 upto 0.69	Substantial association
From 0.70 and above	Very strong association

Source: Joe W. Kotrlik, J. C. Atherton, A. Williams and M. Khatajabor. (2011)

Determining the degree of association between the selected independent variables (Change Management Strategies, Organizational Factors, Contextual Factors for an effective implementation of change management) and project success is the main purpose of conducting an analysis using Pearson correlation. So, in this section the first three hypotheses were tested based on the correlation result summarized in table below.

Table 13 Correlation analysis result

Correlation					
		Change Management Strategies	Organizational Factors	Contextual factors	Project success
Change Management Strategies	Pearson Correlation	1	.648"	.721"	.638"
	Sig (2-Tailed)		0.00	0.00	0.00
	N	45	45	45	45
Organizational Factors	Pearson Correlation	.648"	1	.521"	.487"
	Sig (2-Tailed)	0.00		0.00	0.00
	N	45	45	45	45
Contextual factors	Pearson Correlation	.721"	.521"	1	.455"
	Sig (2-Tailed)	0.00	0.00		0.00
	N	45	45	45	45
Project success	Pearson Correlation				1
	Sig (2-Tailed)	.638"	.487"	.455"	
	N	45	45	45	45
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

Source: Survey analysis result, 2023

4.5.1. Correlation analysis between change management strategies and project success

The change management strategies had a positive relationship and statistically significant role with the project success of the company. In the above table the change management strategies ($r=0.638$, $p<0.01$) is positively correlated with the project success. This implies the presence of very strong relationship between change management strategies and project success which is very strongly significant.

4.5.2. Correlation analysis between organizational factors and project success

The change management strategies had a positive relationship and statistically significant role with the project success of the company. In the above table the change management strategies ($r=0.487$, $p<0.01$) is positively correlated with the project success. This implies the presence of a strong relationship between change management strategies and project success which is very strongly significant.

4.5.3. Correlation analysis between Contextual factors and project success

The change management strategies had a positive relationship and statistically significant role with the project success of the company. In the above table the change management strategies ($r=0.455$, $p<0.01$) is positively correlated with the project success. This implies the presence of a strong relationship between change management strategies and project success which is very strongly significant.

4.6. Linear Regression Models

4.6.1. Multiple regression assumption tests

Various regression assumptions, including linearity, independence of error, covariance, normality, and collinearity, were identified as primary concerns in this study. This section provides details for each hypothesis, examine the consequences of the null hypothesis, and discuss how each hypothesis is tested and the results interpreted. Linear defines the variance of a variable as a function of the predictor (independent) variable (Darlington, 1968). Multiple regression can predict the relationship between success and independent change when the relationship is linear in nature. The potential for nonlinear relationships in the social sciences is high, so linear analysis should be studied (Osborne & Waters, 2002). The covariance assumption means that the error variance at each level of the variable is equal. This means that the researchers assumed that the errors were evenly distributed among the variables (Keith, 2006). This is what happens when the variance around the regression line is the same for all values of the prediction variable. Collinearity (also called multicollinearity) refers to the assumption that the independent variables are uncorrelated (Darlington, 1968; Keith, 2006). When collinearity is low, researchers can interpret the regression coefficients as the effects of independent variables on variables (Keith, 2006; Poole and O'Farrell, 1971). This means that we can trust the perspective of difference. Multicollinearity occurs when several independent variables are related or when one independent variable is a nearly linear combination of other independent variables (Keith, 2006). Multiple regression assumes that the variable is normally distributed (Darlington, 1968; (Osborne & Waters, 2002)). This means that the error is normally distributed and the residual plot

converge to a curve (Keith, 2006). This assumption is based on the shape of the normal distribution and provides researchers with information about the expected value (Keith, 2006). Estimates for new models can be made when the sample size is known (Keith, 2006).

4.6.1.1. Linearity Test

The linearity assumption deals about the relationship between independent and dependent variables should be linear. The linear regression equation is: $Y = \alpha + \beta x$. Where, Y is the dependent variable, x is the independent variable, β is the coefficient of independent variable, and α is constant. Linear equation can be evaluated by using a scatter plot.

The correlation Analysis show that Change Management Strategies ($r=0.638$, $Sig=0.000$), Organizational Factors ($r=0.487$, $Sig=0.000$), Contextual factors ($r=0.455$, $Sig=0.000$), which indicate all are correlated at 0.01 significant level. The significant correlations indicate the linearity which indicates the linearity assumption is proved.

4.6.1.2. Multi collinearity Test

Multicollinearity exists when two or more of the explanatory variables are highly correlated. This is a problem as it can be hard to disentangle which of them best explains any shared variance with the outcome. It also suggests that the two variables may actually represent the same underlying factor. The simplest way to ascertain whether or not explanatory variables are highly correlated with each other is to examine a correlation matrix. A more precise approach is to use the collinearity statistics that SPSS can provide. The Variance inflation factor (VIF) and tolerance statistic can tell you whether or not a given explanatory variable has a strong relationship with the other explanatory variables.

Table 14 Multicollinearity test result

Model	Collinear Statistics	
	Tolerance	VIF (Variance Inflation Factor)
Constant		
Change Management Strategies	0.443	2.21
Organizational Factors	0.424	2.95
Contextual factors	0.391	2.15

Source: Survey analysis result, 2023

Before running the model, existence of multi- Collinearity problem test was conducted to assess using Tolerance and VIF (Variance Inflation Factor) test. According to Pallant (2007), tolerance indicates to what extent the independent variables do not explain much of the variability of a specified independent variable and the value should not be small (more than 0.10) to indicate the absence of co-linearity. In addition to that, VIF, the inverse of tolerance value, should have a value of less than 10 to avoid any concerns of co-linearity (Pallant, 2007). Hence, the values in the table indicate low co-linearity because all Tolerance values are above 0.1 and all VIF values are less than 10. Therefore, these tests reflect that the variables used in the study are free from multi co-linearity.

4.6.1.3. Multiple regression

Regression analysis is a systematic method that can be used to investigate the effect of one or more predictor variables on dependent variable. That is, it allows to make statements about how well one or more independent variables predict the value of a dependent variable. Specifically, this multiple regression was conducted in order to investigate the effect overall bundle of selected determinant factors on Project success.

Table 15 Multiple regression result

Model summary										
Model summary	R	R ²	Adjusted R ²	std Error of the estimate	Change statistics					Durbin-Watson
					R square change	F change	df1	df2	Sig. F Change	
1	0.854	0.729	0.752	0.1775	0.729	17.54	12	33	0.00	1.82
a. Predictors: (Constant), Change Management Strategies, Organizational Factors, Contextual factors										
b. Dependent variable: Project Success										

Source: Survey analysis result, 2023

As shown in the above table the overall bundle of determinant factors of the independent explains 72.9% ($R^2 = 0.729$ of the dependent variables (project performance). This suggests that 72.9% of project performance level clearly depends on the independent variables while the remaining 27.1% is determined by other unaccounted factors in this study. Since as we show table the result $F = 17.54$ which is greater than 1 and $P < 0.01$, it is concluded that the combination of practices has a positive effect on the project success.

Table 16 Anova

ANOVA					
Model	Sum of squares	Df	Mean Square	F	Sig.
Regression	5.32	12	0.62	17.5	.000 ^b
Residual	1.05	33	0.042		
Total	6.37	45			
a. Predictors: (Constant), Change Management Strategies, Organizational Factors, Contextual factors					
b. Dependent variable: Project Success.					

Source: Survey analysis result, 2023

Table 17 Multiple regression result

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error			
(Constant)	.332	.313	.833	.733	.211
Change Management Strategies	.151	.962	.363	1.25	.0331
Organizational Factors	.551	.518	.521	2.31	.0251
Contextual factors	.312	.527	.871	2.22	.0421

Source: Survey analysis result,2023

As it can be seen from the above table, the change management strategies (B= 0.151, p=0.0331) makes the contribution to dependent variable project success which implies that a unit change in the strategy's changes 0.151 in project success.

The organizational factors (B= 0.551, p=0.0251) makes the contribution to dependent variable project success which implies that a unit change in the strategy's changes 0.551 in project success.

The contextual factors (B= 0.312, p=0.0421) makes the contribution to dependent variable project success which implies that a unit change in the strategy's changes 0.312 in project success.

Table 18 Summary of hypothesis result

No	Hypothesis	Result	Decision
1	H1: - Change Management Strategies have significant and positive effect on project success.	r=0.638, Sig=0.000, B= 0.151, p=0.0331	Accepted
2	H2: - Organizational Factors have significant and positive effect on project success.	r=0.487, Sig=0.000, B= 0.551, p=0.0251	Accepted
3	H3: - Contextual Factors have significant and positive effect on project success.	r=0.455, Sig=0.000, B= 0.312, p=0.0421	Accepted

4.7. Regression Mathematical Model

Based on the result in the regression coefficient Table and according to the mathematical equation drafted, the estimated regression model is presented below.

$$Y=a+b_1X_1+ b_2X_2+ b_3X_3+E$$

Y – Project Success

X1 - Change Management Strategies,

X2 - Organizational Factors,

X3 - Contextual Factors,

E – Error

$$Y=0.332+0.151X_1+0.551X_2+0.312X_3$$

4.8. Qualitative results

Here below is the qualitative findings of the interviews conducted to the top managers of trust pharmaceuticals manufacturing plc.

Most of the interviewees agreed that change management has a significant and positive impact on project success if it is implemented effectively. Especially in a pharmaceutical manufacturing project. They also agreed that the stakeholders had an adequate amount of awareness about change and change management.

And since most of the interviewees were working in trust pharmaceutical manufacturing PLC, they had a good knowledge and awareness of the well organized and structured change management plans and strategies drafted and placed in the company.

And the critical factors for the success of the effective implementation of change management are according to the interviewees, the top management awareness and support about the purpose and necessity of the change management to be implemented, Open and smooth communication line between top managers, employees and other stakeholders, Training towards employees to enhance their knowledge regarding the change management process, Alignment of the change management with the organizational goals, Allocation of adequate resources towards the planning and execution stage of change management life cycle, and finally a Well-defined and structured change management strategy is in place.

CHAPTER FIVE: SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1. Introduction

This chapter presents the summary of the research findings (results), conclusions drawn based on the results and the recommendations forwarded.

5.2. Summary of findings

The research project was aimed at evaluating the initial awareness of the stakeholders regarding change and change management, strategies and methods prepared and identifying the challenges encountered in the change management intervention process. Accordingly, the results summary is described here below.

Therefore, this research had one major objective which was to assess the organizational change management practices at trust pharmaceutical manufacturing PLC. The study found that the change management strategies the company had, the level of awareness the top managers had regarding change and change management, and the type of change management the company had implemented, the support, engagement and participations the stakeholders had towards change and change management and the communication strategies had helped in successfully implementing change management in the company.

Also, the organizational factors, like the organizational culture and environment, the structured hierarchical levels, the awareness the staff had about the advantage of change, the project management practices the company had, and the resources allocated towards the change and the representatives of the change management team all had a positive impact on the successful implementation of the change management in the company.

And regarding contextual factors, all the stated factors had like the regulatory rules of the industry changing more often than expected, the technological innovation and advancement, the dynamic nature of the market and the influences of other external stakeholders had a positive impact on the need for the change management of the company. These were the main reasons why the company had to prepare a strategy towards change management for the success of the project.

Also from the research, we can see that the critical success factors for an effective change management are Top management awareness and support about the purpose and necessity of the change management, Open and smooth communication line between top managers, employees and stakeholders, Training towards employees to enhance their knowledge regarding the change management process, Alignment of the change management with the organizational goals, a Well-defined and structured change management strategy being in place. These factors were the reasons why the company was able to implement change management effectively.

When the challenges and problems faced by the company were studied, the research shows that the stated issues or problems had no impact on the implementation of the change management in the company. the research results shows that the answers disagree with the issues and challenges stated in the research meaning that the company had sufficient training, good communication, leadership support, adequate resources and alignment between change management and organizational goal.

But, despite there is an effective change management being implemented in the company, when we see the progress and success of the project, it can be said that all the participant in the research had disagreed that the project was being completed on the intended time, according to the initial budget allocated. But the outcome of the project and the beneficiaries of the project that are directly benefited from the project are people initially intended.

5.3. Further Implication for future research

The result from the study shows that the factors taken as challenges and problems had no effect on the implementation of the change management in the company. this needs to be studied deeper and broader as to identify what are some of the problems and challenges pharmaceutical companies may face in change management implementations.

Despite there is an effective change management being implemented in the company, the project is not being completed on time, with the initial allocated budget. This also needs to be studied to determine the other factors that affects project success.

5.4. Recommendations

The following are recommendations of the study.

- Company managers are very responsible on how to train and manage low class employees regarding change management importance for the implementation of an effective strategy.
- The change management team should be well organized, and should be inclusive of people from all departments.
- The company's current operations in different departments need to be evaluated by a change agent to confirm compliance with company's policy and strategies.
- concern shall be given on the chain of command in order to ensure that messages and orders are being effectively shared and transferred among all employees and departments regarding change management.
- The company stakeholders have to make sure that there is a channel of communication has been set up, and ensure the importance of training and reward systems for change to sustain as well.
- There should be a consensus among company leaders on how to maintain the change and substantiate it during implementation.

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Appendices



Addis Ababa University

School Of Commerce

Research Questionnaire

Dear participant,

The researcher Eyuel Yeneneh is a student of Masters of Arts in Project management at Addis Ababa University School of commerce. You are invited to participate for a research study entitled “**Change Management Practices; A Case Study On Trust Pharmaceutical Manufacturing Plc**”.

Please be assured that your answers will be treated with confidentiality. Your honest answers are needed for this research. Information obtained will be used only for statistical analysis and academic use only. Additionally, after you submit the answers, your identity will not be revealed, since the google account will not show your telegram or google account for the researcher. I would be gratefully if you could take few minutes of your time, and fill this questionnaire.

Your participation is very much appreciated.

If you have any questions,

E-mail: eyuelyeneneh@gmail.com

Tel: +251910547181

Thank you

Section 1: - Demographical information

Please mark in the boxes to show your answers. Make sure that you only choose one answer from the given alternatives.

1. Gender

Male Female

2. Age

Below 30 31 – 40 41 – 50 Above 51

3. Educational background

Diploma

Degree

Masters (MSc, MA)

PhD

4. Work experience

Below 5 years 5 – 10 years Above 10 years

5. Work Place

Trust Pharmaceutical Manufacturing

Construction Contractor

Consultant

Development Bank of Ethiopia

Other _____

6. Position in Work Place

Managerial Position

Engineering Department

Administrative Staff

Other _____

Section 2: - Project Based Questions

Mark either (X) or (√) on the appropriate place to indicate your level of agree on each of the questions per the rating scale below follows:

1= Strongly Disagree (SD) 2= Disagree (D) 3=Neutral(N) 4= Agree (A) 5=Strongly Agree (SA).

		Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
A	Change Management Strategies,					
1	The company managers had the right amount of awareness about change and change management and were well aware of changes that could occur in any stage of life cycle of the project.					
2	The company managers have Implemented the right Change Management Models that fits the project and the company.					
3	The Stakeholder supports the change and the change management by giving consistent attention.					
4	The stakeholders were well engaged and Participates in the change management process.					
5	There was a well-established Internal Stakeholders Communication Strategy that helps discuss the change and change management.					
B	Organizational Factors					
1	The organizational Culture and environment of the company supports change and change management					
2	Organizational Structure and Hierarchical Levels are well defined and helps the implementations of the change management.					

3	The company has created an awareness among the staff that change brings an advancement for the success of the project.					
4	The Project Management Practices implemented in the company supports the change management system.					
5	The company has a change management methodology that is easy to apply at any stage of the project.					
6	The company has a change management methodology that is easy to implement across multiple changes. (This here is only applied to a specific project).					
7	All the required and necessary resources were allocated for the change management process in the company.					
8	In the company, representatives of the change management team are from all departments affected by the change.					
C	Contextual Factors					
1	Regulatory rules of the pharmaceutical industry have been changing more often than expected leading to changes in scope, time and budget of the project.					
2	Technological Advances and Innovation have been changing more often than expected leading to changes in scope, time and budget of the project.					
3	Market Dynamics and Competition in the pharmaceutical manufacturing industry has a					

	significant role for the need of change management.					
4	External Stakeholder Influence has a significant role for the need and implementation of the change management.					
D	What are the critical success factors for effective change management.					
1	Top management awareness and support about the purpose and necessity of the change management.					
2	Open and smooth communication line between top managers, employees and other stakeholders,					
3	Training towards employees to enhance their knowledge regarding the change management process,					
4	Alignment of the change management with the organizational goals,					
5	Allocation of adequate resources towards the planning and execution stage of change management life cycle.					
6	Well defined and structured change management strategy is in place,					
E	Challenges and problems faced by the company during implementing change management.					
1	Insufficient Training was a major problem in change management implementation					
2	Poor Communication was a major problem in change management implementation					
3	Lack of Leadership Support was a major problem in change management implementation					

4	Inadequate Resources was a major problem in change management implementation					
5	Misalignment between Change Management and organizational goal was a major problem in change management implementation					
F	Project Success/ Evaluation of the project progress,					
1	The project is being completed on the time intended as scheduled.					
2	The project is being completed according to the budget allocated.					
3	The outcomes of the project are likely to be as planned.					
4	The outcomes of the project will directly benefit the intended end users, through increasing efficiency.					
5	Stakeholders are satisfied with the progress by which the project is being implemented.					
6	Project team members are satisfied with the process by which the project is being implemented.					
7	The company identify metrics that adequately demonstrate adoption of the desired change.					
8	Based on the results of the assessment, the change management team takes a corrective action.					

Interview Questions

1. What do you think about the role of change management on achieving project success on a pharmaceutical project?
2. Do you believe that the stakeholders had the adequate number of changes that could occur during all the life cycles of the project?
3. Do you believe that there was a well-organized and structured change management strategy and plan to be used?
4. How do you define a project success?
5. What do you think is the relationship between a change management and project success?
The role change management has on project success?
6. What do you think are the challenges and problems in implementing change management?
7. What do you believe are the success factors for the effective change management implementations?