ST. MARY UNIVERSITY SCHOOL OF GRADUATE STUDIES

MASTERS OF BUSINESS ADMINISTRATION

IN GENERAL MANAGEMENT

THE EFFECT OF MANAGEMENT PRACTICE ON OPERATIONAL PERFORMANCE IN THE CASE OF CADILA PHARMACEUTICALS (ETHIOPIA) PLC

BY:

HAILEYESUSREGASSAABDI

MAY- 2019
ADDIS ABABA, ETHIOPIA

ST. MARY'S UNIVERSITY
SCHOOL GRADUATE STUDIES

THE EFFECT OF MANAGEMENT PRACTICE ON OPERATIONAL PERFORMANCE IN THE CASE OF CADILA PHARMACEUTICALS (ETHIOPIA) PLC

BY:

HAILEYESUS REGASSA

A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF BUSINESS, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS DEGREE IN BUSINESS ADMINISTRATION (GENERAL MANAGEMENT)

ADVISOR: MULATUTAKELE (PHD)

MAY 2019

ADDIS ABABA, ETHIOPIA

APPROVED BY BOARD OF EXAMINERS

We, the undersigned, members of the Advisor and Examiners of the final defense by Haileyesus Regassa have read and evaluated his thesis entitled **"The Effect of Management Practice On Operational Performance In The Case of Cadila Pharmaceuticals (Ethiopia) plc."** and examined the candidate. This is therefore to certify that the thesis has been accepted in partial fulfillment for the award of the degree of Master of Art in Business Administration.

_____	_____
Dean, Graduate Studies	**Signature& Date**
_____	_____
Advisor	**Signature & Date**
_____	_____
External Examiner	**Signature & Date**
_____	_____
Internal Examiner	**Signature & Date**

DECLARATIONS

I, **Haileyesus Regassa**, Registration I.D. Number **SGS/0212/2010A**, hereby declare that this thesis is my original work and that it has not been submitted partially or in full, for an award of a degree in any other university or institution.

HaileyesusRegassa _____

Name Signature

St Mary's University, Addis Ababa MAY 2019

ENDORSEMENT

This Thesis has been submitted to St.Mary University for examination with my approval as University advisor.

MulatuTakele (PHD) _____

Advisor Signature and date

St Mary's University, Addis Ababa MAY 2019

ACKNOWLEDGEMENTS

First of all I would like to thank almighty God for being with me always in my entire endeavor. I thank my advisor **MulatuTakele (PhD)** for his friendly approach, immediate feedback and constructive comments on this study with his useful suggestions. I also appreciate Cadila pharmaceuticals (Ethiopia) Plc. members and managers for their collaboration during the data collection for the study.

I would also like to thank my beloved family for their logistical, material and moral support since primary school. I would also like to thank all of my friends for their moral support in all of my school life.

ABBREVIATIONS/ ACRONYMS

API	Active Pharmaceutical Ingredient
EFMHCA	Ethiopian Food, Medicine and Health Control Authority
ETP	Effluent Treatment Plant
GMP	Good Manufacturing Practice
SOP	Standard Operating Procedure
SPSS	Software Package for Social Science

Table of Contents

Contents **Pages**

List of tables

Titles **Pages**

Abstract

The purpose of this study is to investigate the influence of management practice on CadilaPharmaceuticals operational Performance . It investigates the effect of management practice elements in Cadila pharmaceuticals on its operational performance components. The study surveyed the employees and managers working at Cadila pharmaceuticals plc.Practical datawere collected from 186employees and 5 managers by means of a questionnaire and interview respectively.And also this study conducted using a probability random sampling using lottery method by dividing into strata based on departments, so some of the population involved in the study. Statistical techniques such as descriptive and inferential statistics, correlation, and multiple regressions were employed to find out the extent of management practice and operational performance in addition the relationship between management practice and operational performance also the influence of management practice on operational performance.The results of the study indicated a positive significant relationship between management practice variables (shop floor operation, performance monitoring, target setting and incentive setting) and operational performance variables (compliance with regulation, waste reduction and productivity). The results also indicated that the employees in Cadila pharmaceuticals plc agree that shop floor operations, performance setting, Target setting and incentive setting are very important for better operational performance (compliance with regulation, waste reduction and productivity). of the company. The resultsalso showed that there is a strong relationshipbetween managementpractice and operational performance. Results indicated that the each components of management practice(shop floor operation, performance monitoring, target setting and incentive setting)was having the highest effect on operational performance, Finally, the study recommended to improve the four components of management practices(shop floor operation, performance monitoring, target setting and incentive setting) because they are strongly interrelated and have influence on the productivity, waste reduction and compliance with regulation of the company.

Key words: Management practices, operational performance, shop floor operations, performance monitoring, target setting, incentive setting, compliance with regulation, waste reduction, increased productivity.

CHAPTER ONE

INTRODUCTION

This chapter deals with background of the study ,general and specific objectives of the study, significance of the study, scope of the study, limitations of the study, operational definitions of key terms and organization of the study.

1.1 Background of the Study

There is indeed a difference in productivity between different entities; the question remains on the causes this difference. One potential answer is the use of different management practices. Management practices are linked to the productivity and performance of a company. Studies that investigate the link between management practices and productivity have assessed the impact of an individual practice in isolation, the effects of joint adoption of practices and the impact of clusters or systems of complementary practices. Management practices usually refer to the working methods that managers use to improve the effectiveness of work systems including empowering staff, training staff, introducing new technology, etc. On the other hand operational performance is a performance of a company against prescribed standards such as compliance with regulations, waste reduction productivity etc. Measuring management practices requires codifying the concept of good and bad management into a measure applicable to different firms within the manufacturing sector. There are a number of reasons why measured productivity may differ, which do not necessarily reflect underlying differences in productivity (Griffith and Harmgart, 2005).

The key management practices matter to industrial firms based on McKinsey's expertise in working with thousands of companies across several decades. These key management practices fall into four broad areas: Shop floor operations: refers to companies adopted both the letter and the spirit of lean manufacturing. Performance monitoring: deals with how well do companies track what goes on inside their firms. Target setting: refers to companies setting the right targets, track the right outcomes and take appropriate action. Incentive setting: deals with hiring, developing

and keeping the right people (rather than people they could do without) and provide them with incentives to succeed. (McKinsey & Company2009)

Most of the employees in different manufacturing companies complain on the implementations of management practices specially on organizing activities, performancemonitoring, target setting and achievement and also incentive system. This seems to be seen in Cadila pharmaceuticals (Ethiopia) plc.

The aim of this study is to apply best management practices and improve the productivity of Cadila pharmaceuticals (Ethiopia) plc.

1.2Background of Cadila pharmaceuticals (Ethiopia) plc.

Cadila pharmaceutical factory was established in 1996 as a company by Ethio-indian joint venture ,Currently the company has been manufacturing more than 50 high quality pharmaceutical products of different therapeutic categories including Antibiotics, Gastro-intestinal drugs, Central Nervous system drugs, Cardiovascular drugs, ant diabetic agents, Antihistamines & Anti allergic, Ant helminthes, analgesics, Ant protozoa's, Respiratory drugs, and Minerals & Vitamins.

The company has more than three production lines and fully equipped laboratories as well as utilities capable of producing tablets, capsules, and syrups/suspensions. (Quality manual, 201) Pharmaceutical production occurs at three levels, primary, secondary and tertiary. The primary level includes the manufacture of active pharmaceutical ingredients and intermediates from basic chemical and biological substances. Secondary production includes the production of finished dosage forms from raw materials and excipients. The tertiary level is limited to packaging and labeling of finished products or repackaging of bulk finished products. (WHO AFRO, SADC, 2005).

The company under study produces the Secondary pharmaceutical products by sourcing the primary raw materials (API and Excipients) mostly from China and India. Cadilapharmaceuticals operate its activities through cooperation of different managerial hierarchies and departments trying to achieve the goal of the company. The human resource department is responsible for managing the overall man power of the company through the HR manager. The production department manufactures different products through the control of the production manager. The store department feeds raw materials to the production and released the finished products to the

market by the control of ware house manager. The manufactured products are approved and released to the customers if and only if the QA-QC department gives a conformation to the concerned body through QA manager. The engineering department solves problems related to damage of machines and gives preventive maintenance through the control of the department manager. The activities performed by these department managers can positively or negatively affect the performance of the organization (SOP of the company).

1.3Statement of the problem

Management practices are the main tools to reach on the overall objectives of the company. They need to be well formulated and implemented in every organization to have better output. They also used as pillars for administration of man power within an organization. Management practices have a directly related with the activities of employees in the company in different aspects like shop floor operations (organizing), performance monitoring, target and incentive setting etc.

Management practice implementation seems to be a problem seen in many companies. It was shown that many challenges and obstacles were confronting the management which in turn affected the overall performance at many organizations.This might be caused by the difference in commitment on formulating and implementation of management practices.Hence, searching the main management practice problemsmight have a significant role on finding the solution after analyzing the existing situations.

Cadila pharmaceuticals is a company that seems to have a problem on formulation and implementation of management practices related with organization of activities, performance monitoring ,target achievement and incentive setting that created problem on achieving its plan due to lack of motivation and competency of employees, absenteeism and other factors like excessive waste and turnover.

According to the informal discussions the researcher made with employees of the company, it was indicated that implementation of management practices is becoming one of the major problems for the organization. This affects the overall growth of thecompany. The existing management practice was known and might be used as a starting point for necessary correction to have better operational performance.

Therefore, this study has attempted to examine some extent of application of management practices. So that it has a significant contribution. The research mainly focuses onmajorfactors (shop floor operations, performance monitoring, target achievement and incentive setting) of management practice.

So the study contributes to investigate, formulate and implementmanagement practice elements shop floor operations, performance monitoring, target achievement and incentive setting) to have improved operational performance variables(productivity, waste reduction andcompliance with regulation).

1.4Researchquestions:

The following research questions have been identified to conduct a meaningful study:

I. What is the extent of management practice in Cadila pharmaceuticals (Ethiopia) plc?
II. What the extent of operational performance of Cadila pharmaceuticals (Ethiopia) plc?
III. How the management practice and operational performance are related?
IV. How management practices influence operational performance?

1.5Objectives of the study

1.5.1 General objective

To assess the effect of management practice on the operational performance of Cadila pharmaceuticals (Ethiopia) plc

1.5.2 Specific objectives

- To analyze the extent of management practices in Cadila pharmaceuticals (Ethiopia) plc.
- To analyze the extent of operational performance of Cadila pharmaceuticals (Ethiopia) plc.
- To explain the relationship between management practice and operational performance.
- To analyze the influence or effect of management practice on operational performance.

1.6Significance of the study

This research benefits:-

- Cadila pharmaceuticals (Ethiopia)plc to take corrective measures on its management systems and practices in order to enhance its operational performance.
- Other pharmaceutical companies to learn from cadila pharmaceuticals plc by taking preventive measures in order to preclude management practice problems not to happen.
- It will provide empirical evidence to management practitioners to exercise management theories and practices on the organization that they are currently working.
- It will give a clue for other researchers to investigate more on the improvement of performance related to management practices.

1.7Scope of the study

This research is limited in Cadila pharmaceuticals (Ethiopia) plc compound. Conceptually, this study focuses on assessing the management practiceselements (only on shop floor operation(organizing activities), performance monitoring, target setting and incentive setting)and operational performance variables (increased productivity, waste reduction and compliance with regulation) that are main ways to achieve the company's objectives and its target population is 186which is only limited to employees and the management staff of the company.

1.8Organization of the study

This study is structured into five chapters; Chapter One gives a brief introduction to the subject of the study. It starts by presenting the background of the study. It continues by providing the statement of the problem of the study, highlights the goals of the study and a brief definition of the key concepts is presented. At the end of the chapter the organization of the study is be described. Chapter two discusses the theoretical positioning of the study. It focuses mainly on defining the theoretical concepts, explains the details of empirical or previous studied and show the conceptual frame work of the study. Chapter three presents the study methodology and discusses the procedures used to obtain the data, the reason for using this method, reliability and validity of the study, the limitations of this study and gives a presentation of the study results and their analysis.

It also It discusses managerial implications and provides the conclusion to this study. Towards the end of the chapter, future research was suggested. Chapter four presents about results, interpretations and discussions. Chapter five presents about summary, conclusions and finally gives recommendations for the existing problem.

CHAPTER TWO

LITERATURE REVIEW

This chapter focuses on defining the theoretical concepts, explains the details of empirical or previous studied and show the conceptual frame work of the study.

2.1 Theoretical concepts

2.1.1 Definition and theories of management practices

Definition

Management practicesare the working methods that managers use to improve the effectiveness of work systems including empowering staff, training staff, introducing new technology, motivation etc. (Arbós, 2002).

2.1.2 Management Practices theories

The benefits of management practices are all ultimately evaluated by their contribution to firm operationalperformance.

2.1.2.1 Measuring Management Practices

There is no consensus in the literature on how to measure management practices. The only commonality shared by all the studies is that management practices are measured in a multidimensional fashion. Because of the inherently intangible nature of management practices, it is very challenging to apply objective forms of measurement. Measures are aggregated to facilitate analysis at the plant-, firm-, industry- or country-level. In the academic literature, these practices are measured using any combination of a variety of scientific methods: self-reported questionnaires, interviews and observations. Questionnaires and interviews may collect data regarding retrospective or concurrent (or less frequently the prediction of future) management practices. The majority of studies conducting empirical research obtain information by surveying a single knowledgeable individual from each unit of interest, and a minority involves more than one respondent. Less frequently, research studies rely on various unstructured assessment methods,

such as observations and analysis of field data collected (Rotab Khan, 2000) and observations alone (Arbós, 2002).

2.1.2.2 Dimensions of management practice

According to Bloom and Van Reenen management practices can be manifested in 18 dimensions. The dimensions are listed below.

(1) Introduction of modern manufacturing techniques

- Aspects of manufacturing have been formally introduced, including just-in time delivery from suppliers, automation, flexible manpower, support systems, attitudes, and behavior.

(2) Rationale for introduction of modern manufacturing techniques

- Modern manufacturing techniques adopted just because others were using them, or are they linked to meeting business objectives like reducing costs and improving quality.

(3) Process problem documentation

- Process improvements made only when problems arise, or are they actively sought out for continuous improvement as part of normal business processes

(4) Performance tracking

- Tracking ad hoc and incomplete, or is performance continually tracked and communicated to all staff.

(5) Performance review

- Performance reviewed infrequently and only on a success/failure scale, or is performance reviewed continually with an expectation of continuous improvement.

(6) Performance dialogue in review/performance conversations,

- The extent of the purpose, data, agenda, and follow-up steps (like coaching) clear to all parties.

(7) Consequence management

- Extent of failure to achieve agreed objectives, carry consequences, which can include retraining or reassignment to other jobs.

(8) Target balance

- The goals exclusively financial, or is there a balance of financial and nonfinancial targets.

(9) Target interconnection

- Goals based on accounting value, or are they based on shareholder value in a way that

works through business units and ultimately is connected to individual performance expectations.

(10) Target time horizon

- The top management focuses mainly on the short term, or does it visualize short term targets as a "staircase" toward the main focus on long-term goals.

(11) Target stretching

- Goals too easy to achieve, especially for some "sacred cow" areas of the firm, or are goals demanding but attainable for all parts of the firm.

(12) Performance clarity

- Performance measures defined, understood, and private, or well-defined, clearly communicated, and made public.

(13) Managing human capital

- The extent to which senior managers evaluated and held accountable for attracting, retaining, and developing talent throughout the organization.

(14) Rewarding high performance

- The extent to which people in the firm rewarded equally irrespective of performance level, or is performance clearly related to accountability and rewards.

(15) Removing poor performers

- Poor performers rarely removed, or are they retrained and/or moved into different roles or out of the company as soon as the weakness is identified.

(16) Promoting high performers

- People are promoted mainly on the basis of tenure, or does the firm actively identify, develop, and promote its top performers.

(17) Attracting human capital

- Competitors offer stronger reasons for talented people to join their companies, or does a firm provide a wide range of reasons to encourage talented people to join.

(18) Retaining human capital

- The firm is relatively little to retain top talent, or it does whatever it takes to retain top talent when they look likely to leave.

Source :(Bloom and Van Reenen, 2007)

2.1.2.4The Relationship between Management Practices and Operational Performance

There are a number of reasons why measured productivity may differ, which do not necessarily reflect underlying differences in productivity (Griffith and Harmgart, 2005). Accepting that there is indeed a difference in productivity between different entities, the question remains what causes this difference? One potential answer is the use of different management practices. Different scholars investigate the issue and review the potential role of management practices on productivity.

Several arguments can be found in the management especially on management literatures, for the expected positive relation between management practices and a firm's productivity (Wolf, 2002).

First, investments in the human capital of the workforce may increase the productivity of workers (Bartel, 1994).

Second, good management policies may increase the motivation of workers (Ichniowski et al, 1997; Wood, 1999).

Third, increasing the autonomy and responsibilities of the workers may diminish waste and inefficiencies because it enables the firm to take advantage of the specific knowledge of non-managerial workers (Appelbaum, Berg, Bailey and Kalleberg, 2000; Preuss, 2003).

Fourth, good management policies may contribute to workers commitment to their tasks and willingness to do a better job (Ichniowski et al, 1997).

2.2 Empirical review

There is a growing literature that studies empirically the impact of management on productivity.

The importance of management has long been recognized in the literature on production, productivity and efficiency though its importance is not yet fully recognized in the mainstream economics literature which argues that there is no need to treat management separately because competition would weed out bad management swiftly (Bloom et al., 2011). But, there is no empirical evidence for such a hypothesis. Large numbers of studies have found that differences in firm performance persist over time and the inability to adopt best management practice is a likely cause (Syverson, 2011).

RamazanYılmaz examined the relationship between management practicesand operational performances. The results of empirical evidences of this article show that there is a meaningful relationship between them. Companies, which want to be the most competitive companies against their competitors in their sector in the market, have to use actively management as a gun that enhances their organizational performance and makes them leaders of the market.(RamazanYılmaz, 2015)

Wall and Wood (2005) suggest it is unlikely that there exists a 'one size fits all' set of Productivity-enhancing management principles or practices. Edwards et al (2004) builds uponthis contingency approach, stating that the success of management practices are firm-specific and these are affected by the prevailing institutional environment.

Wood and Wall investigate the link between management practices and productivity or performance have assessed the impact of an individual practice in isolation, the effects of joint adoption of practices and the impact of clusters or systems of complementary practices (Wood and Wall, 2002).

The studies found in the literature have predominantly reported a positive effect of using management practices although it needs to be ensured that costs for introducing and maintaining these practices do not outweigh their benefits. Empirical evidence suggeststhat unionization is animportant mediator for the success of management practices.(Barney, 1991; Barney, 2001).

The researchers used an interview-based management practice from 1 (worst practice) to 5 (best practice) across 18 of the key management practices that appear to matter to industrial firms based on McKinsey's expertise in working with thousands of companies across several decades. The 18 practices fall into four broad areas:

- **Shop floor operations**:
  - ✓ Have companies adopted both the letter and the spirit of lean manufacturing?
- **Performance monitoring**:
  - ✓ How well do companies track what goes on inside their firms?
- **Target setting**:

- ✓ Do companies set the right targets, track the right outcomes and take appropriate action if the two don't tally?

- **Incentive setting**:
  - ✓ Are companies hiring, developing and keeping the right people (rather than people they could do without) and providing them with incentives to succeed? (McKinsey,2009)

For each company in this study, researchers interviewed one or two senior plant-level managers, who knew only that they were taking part in a 'research' project. These managers were selected because they are senior enough to have a reasonable perspective on what happens.

The current study may have the following contribution compared to previous studies:

- Most of the previous studies were conducted to measures management practices from the five functions perspective. Whereas this study considered other perspectives.
- It studies gives more details specifically on organizing, performance monitoring, target achievement and incentive setting
- Previous researches were conducted on different companies, but this study is dedicated to Pharmaceutical Company.

2.3 Conceptual framework

This research consists of total five variables and four are independent variables such as Shop floor operations, Performance monitoring, Target setting and Incentive setting. They have influence or effect on dependent variable operational performance (Compliance with regulations, Waste reduction, increased productivity and Meeting pharmaceutical standards of manufacturing). According to the impact of management practices on the performance of organization have some backing for positive relationship between management practices like Shop floor operations, Performance monitoring, Target setting and Incentive setting.

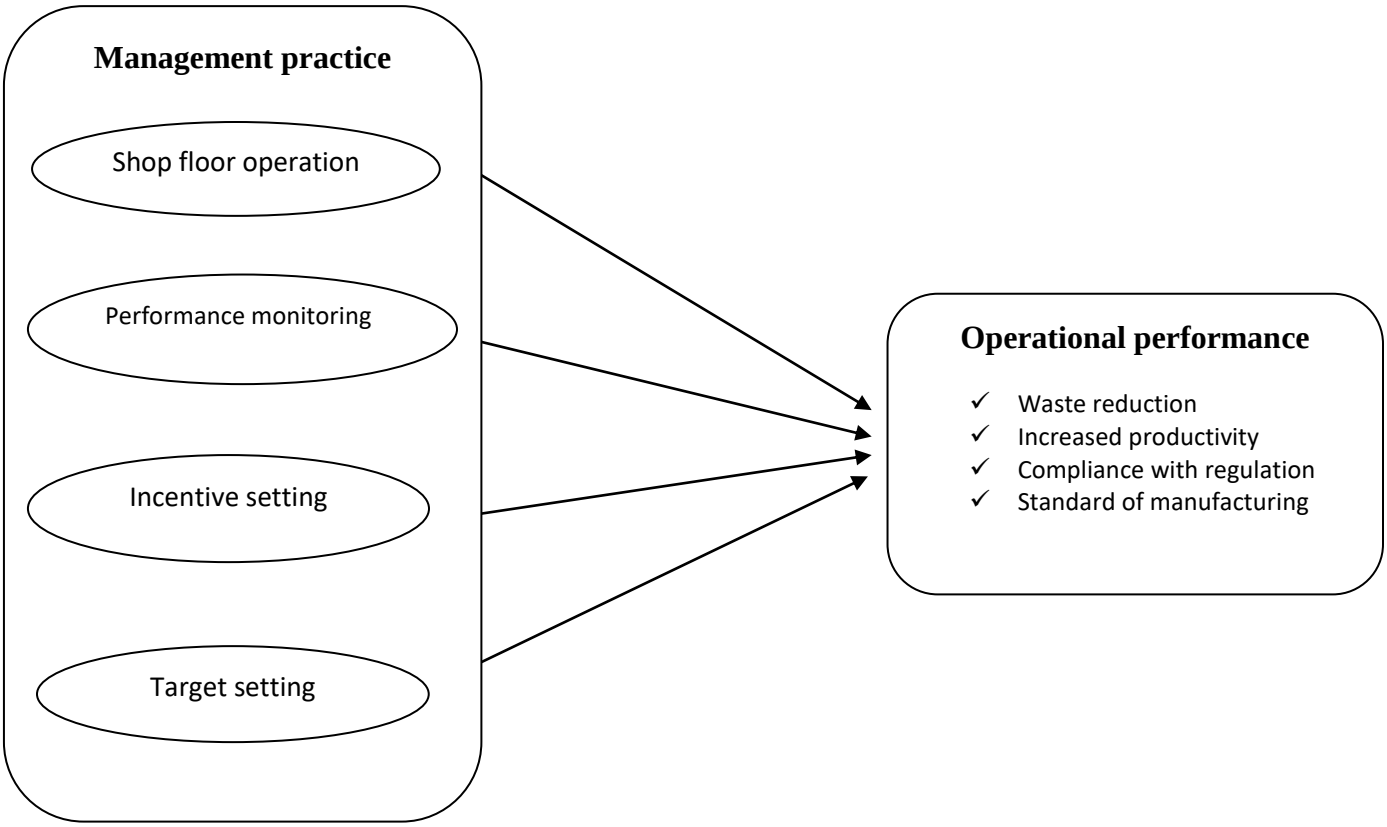

Fig.1 conceptual framework

Source; own source, 2019

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter deals about types and approaches of research design; sampling and sample design; types, sources and methods of data collection; method of data analysis and time and budget schedule of the study.

3.1 Types of research design and approach

3.1.1 Research Approach

The research used both quantitative and qualitative research approaches to produce valuable data and conclusions. Quantitative approach was used to describe the existing situation whereas, qualitative approach was concerned with subjective assessment and infer the characteristics of sampled management staff and employee to the target population. The research described the existing management practice and the situation in Cadila pharmaceuticals (Ethiopia) plc.

3.1.2 Research Design

The study design for this research was descriptive and explanatory research design. The descriptive research study enables to examine the existing situation of management practice in the company and the explanatory helps to show the relation between management practice and operationalperformance. The survey method was used for the data collection purpose because for this type of research it is appropriate since it collects information from the sampled respondents and made conclusion about the problem.

3.2 Sampling and Sample design

3.2.1 Target population

The target population of Cadila pharmaceuticals (Ethiopia) plcmanagement staff and employees is 390 and was divided into strata based on departments in which they work, and Thereafter respondents was selected randomly by lottery method from the various departments that provide services to the company.

3.2.2 Sampling Technique

In this study, a probability sampling technique was used to select sample respondents precisely. The proportional stratified sampling was employed by dividing in to departmentsthen random sampling technique was used to select representative samples from all 348 employees.

3.2.3 Sample size determination

This is used in order to reduce the sample size to a manageable size Thus, The use of the Yamane's (Yemane, 1967) expression, was used:

$$n = \frac{N}{1+N(e^2)}$$

Where:

n= Sample size

N= Total population

e= Margin of error disturbance

Therefore;

Given that N = 390 (as stated above), and e is assumed to be 5%

Then sample size,

$$n = \frac{390}{1+390(0.05)^2}$$

$$= 198$$

In the final stage employees was selected randomly using probability proportional to sample size-sampling techniques.

3.3 Data sources and Methods of data collection

3.3.1 Data types and sources

3.3.1.1 Primary source

The data from the primary sources was gathered through field survey from the relevant respondents. The respondents are management staffs and non-management employees. This method was employed to assess the management practice towards the effective production of Cadila pharmaceuticals. The suggestion for achieving an effective management system for better operational performance was also taken from the respondents.

3.3.1.2 Secondary sources

Annual reports of Cadila pharmaceuticals, different reports and statistics on the pharmaceuticals were used.

3.3.2 Methods and Tools for Data collection

A survey method was adopted for collecting evidences from employees and management staff through;

a. Questionnaire

The questionnaire was administered on individual employee. It was structured to capture factual information on the research issue.

Questionnaire Variables:

The questionnaire variables are divided into two parts

1- First part contains demographic dimensions related to gender, age, academic qualification, position, department, and experience.

2- Second part is composing of both independent and dependent variables as follows:

a- Independent Variables (Management practices): Based on literature review, the researcher has identified four variables that contribute to Cadila pharmaceuticals (Ethiopia) operational performance (shop floor operations, target setting incentive setting and performance monitoring)

b- Dependent Variable (Operational Performance): Based on literature review, the researcher has identified four dimensions related to operational performance (waste reduction, increased productivity compliance with standards of manufacturing and regulation of the country) .All items were measured by five-point Likert-type scale to take the advantage of respondent's perceptions, varying from value 1 (strongly agree) to value 5 (strongly disagree) that was used through the study questionnaire.

b. Interview

A semi structured or questions that should be answered are prepared and left opened to collect more valuable data from the interviewee and pre-tested interview (interview questions were pre-checked before performing the actual interview) schedule was used to collect data. Necessary correction, modification and alterations were done accordingly. Data was collected through personal interview during March-2019. Interview was conducted with the organization management staff, and information on the nature of management practice was collected.

3.3.3 Procedure of Data collection

The procedure for the data collection was using questionnaires; first the respondents were communicated to get their consent. Once their consent known, the prepared questionnaires was distributed to each participant by appreciating their participation and devoting their precious time for the research. The questionnaires were collected by checking the completeness of the data. Finally the activities were accomplished by appreciating the respondents.

Data was also collected using structured interview; first the interviewees were communicated and appointment was arranged to take the interview. The interviews were started by appreciating the interviewee for giving their precious time. When the respondents are ready, questions was forwarded accordingly.

3.4 Data analysis method

Various descriptive and inferential statistical measures such as number and percentage distribution, range, mean and standard deviation was calculated and also regression analysis is done. Simple tabular techniques were used to explain the data. Minimum, maximum, mean, standard deviation and percentage for quantitative variables and percentage for qualitative variables are used to illustrate the results. Data processing was performed by computer program. The SPSS computer programmer was used for analysis of data.

3.5 Reliability and Validity of instruments

*3.5.*1 Reliability

Golafshani (2003) defines reliability as the extent to which results of a study are consistent over time and there is an accurate representation of the total population under study.

According to Toke, (2012), the aim of reliability analysis is to find the extent to which a measurement procedure produced the same result if the process is repeated over and over again under the same conditions. The most common technique used in the literature to assess the scales reliability and stability is use of the Chronbach Alpha Statistics. Chronbach Alpha should be above 0.70 to produce a reliable scale and any scale with Chronbach Alpha less than this standard should be eliminated Sekaran (2005).

Table 3.1 Reliability analysis

Variables	No. of Items	Cronbach's Alpha
Shop floor operation	6	0.700
Performance monitoring	6	0.702
Target setting	4	0.759
Incentive setting	6	0.814
Compliance with regulation	3	0.755
Waste reduction	4	0.812
Increased productivity	3	0.774
Standard of manufacturing	5	0.827

Prior to the actual data collection, pilot test was conducted by distributing sample questionnaires to 30 respondents in the company to ensure the reliability of the instrument in this case of study and the researcher has tested the reliability using Cronbach's Alpha (α). Cronbach's Coefficient (α) is calculated to estimate the internal consistency of reliability of a measurement scale. Cronbach's Coefficient is a reasonable indicator of the internal consistency of instruments that do not have right or wrong marking schemes, thus can be used for questionnaires using scales such as rating (Black & Leslie, 1999).The reliability coefficient is acceptable if it is between 0 and 1 but if it is closer to 1 it is assumed to be better. Therefore, the research reliabilityvalues are greater than 0.7.Which means that closer to 1.This indicates that result obtained is reliable if the study is done repeatedly.

3.5.2 Validity

Validity is according to Kirk &Miller(1986) the measurements that the authors has taken to make sure that everything is relevant to the context, in other words, make sure that the research is valid. By doing so, the researcher was focused on the subject. Thus the instruments were carefully designed and then review by subject experts, who are acknowledgeable in the area. In addition, the instruments were evaluated by the thesis advisor. Based on the feedback obtained from the subject experts and the thesis advisor, the instruments were modifiedand further enriched finalized in a form that they would be clear and easily understandable to the respondents of the study.

3.6Ethical consideration

The research used the data from respondents which was collected through questionnaire and structured interview; permission was obtained from the respondents. To maintain the confidentiality of the information provided by the respondents, the respondent instructed not to write their name on the questionnaire and was assured of that the responses was used only for academic purpose and kept confidential.

CHAPTER FOUR

DATA ANALYSIS, DISCUSSION AND INTERPRETATION

In this chapter, findings of the study are presented based on the effect of management practice in Cadila pharmaceuticals (Ethiopia) plc, on its operational performance.

4.1. Response Rate of respondents

The questionnaires were distributed to 198 employees. Among those distributed questionnaires 186 questionnaires were returned.93.9% of the questionnaire was collected. The next analysis is done based on 186 sample size.

4.2. Demographic Characteristics of respondents

This section of the study presents the respondents gender and educational level.

Part 1 Questionnaire Data of Survey Respondents

4.1 Personal Profile of Respondents

Demographic data		Frequency	Validity %
Sex	Male	104	55.9
	Female	82	44.1
	Total	186	100.0
Age	25-35 years	128	68.8
	36-45 years	43	23.1
	46-55 years	15	8.1
	Total	186	100.0
Marital Status	Single	102	54.8
	Married	84	45.2
	Divorced	-	-
	Widowed	-	-
	Total	186	100.0
Education	High school	92	49.5
	Diploma	31	16.7
	Bachelor	47	25.3
	Masters	16	8.6
	Total	186	100.0
Experience	1-5 years	66	35.5
	5-10 years	71	38.2

	10-15 years	41	22.0
	Above 10 years	8	4.3
	Total	186	100.0

Source: Field survey, 2019

As shown in the above table 4.1 the gender distribution of respondents which is 55.9% of the respondents are male while the rest 44.1% are female. This shows that the number of male employees dominates the number of female employees in the company.

As to the age distribution of the respondents , out of the total respondents 68.8% of the respondents are between the age 25 -35; 23% of the respondents are found between the age 35 to 45; 8.1% of the respondents are found between the age of 46-55. This indicates that most employees found in cadila pharmaceuticals are young employees and young employees need better payment, good working condition, challenging works and are also sensitive to any inequity or other ill treatment by supervisor or the management.

As to the marital status of the respondents and we can see that out of 186 respondents, 54.8% of the respondents are single; 45.8% of the respondents are married and none of the respondent are divorced and widowed. This shows that more than half of the respondents aren't married and according organizational behavior studies by Kondalkar (2007), married employees typically are found to be somewhat decent and matured than employees who have family and dependants responsibilities. This employee's most likely to have parental responsibilities and have low level of commitment than those who are married.

As shown in the above table 4.1, only 49.5% of the respondents have a less than diploma,16.7% have diploma; 25.3% of the respondents have 1st degree and 8.6% of the respondents have master's degree. Based on this the above data it's possible to say that most employees in the cadila pharmaceuticals are holders of less than diploma which means most employees in the factory are not well educated and perform their work under strict supervision of qualified employees.

As to the experience (length of service) of respondents within their current organization, out of the total respondents 35.5% of the respondents have served the company less than one year; 38.2% of the respondents have served the company in the year between 1-5; 22.0% of the respondents have served the company between the year 5 to 10 and the rest 4.5% of the respondents have served the company for more than 10 years. As it's shown in the table most employees have worked in the

company for a short period of time which is only 1-5 years and below one year. This entails that most employees have few years of work experience which is considered to be lower employee productivity since experienced employees perform well and Kondalkar, 2007 has stated that there is a positive relationship between seniority and job performance. Also this shows that the company has a medium retention strategy.

4.3 Analysis of Data Collected for the Study

4.3.1-Shop floor operations

As it is already known exercising management practices in any company have an impact on its overall operational performance. A principle of lean manufacturing or organizing activities is one of an important practice to achieve the goal of the company especially in manufacturing sector. However, according to the research made Cadila have a difficulty of shop floor operation and lean manufacturing in order to achieve the intended target. A single product is a result of many different unit operations. These unit operations should be linked and organized each other to reach the end point of production. In addition Cadila have many departments that must be organized. Every department has to work together. Disorganization between unit operations and departments has caused delays to flourish in addition to so many other factors.

Table 4.2 Organization of unit operations in the company

S.N	Questions	response rate	Level of agreement					Mean	S/D
	Spirit of lean manufacturing is not as such important for the productivity in your company		SD	D	N	A	SA	2.1546	1.0254
		Frequency	81 (43.5%)	72 (38.7%)	16 (8.6%)	14 (7.5%)	3(1.6%)		
1.1		Valid percent	43.5	38.7	8.6	7.5	1.6		
	Your company organizes its internal processes in a manner to shorten activities	Frequency	4(2.2%)	115(61.8%)	14 (7.5%)	50 (26.9%)	3 (1.6%)		
1.2		Valid percent	2.2	61.8	7.5	26.9	1.6		
	Modern manufacturing techniques are adopted to meet business objectives like reducing costs and improving quality.	Frequency	2(1.1%)	85(45.7%)	15(8.1&)	50(26.9%)	34(18.3%)		
1.3		Valid percent	1.1	45.7	8.1	26.9	18.3		
	your company possesses the ability to respond rapidly to changes in the work Environment (internal& external	Frequency	12(6.5%)	92(49.5%)	19 (10.2%)	45 (24.2%)	18(9.7%)		
1.4		Valid percent	6.5	49.5	10.2	24.2	9.7		
	Your company has smooth flow of work and simplifying operational structure of the work.	Frequency	26(14%)	19(10.2%)	53(28.5%)	61(32.8%)	27(14.5%)		
1.5		Valid percent	14.0	10.2	28.5	32.8	14.5		
	Process improvements made when ever needed.	Frequency	105 (56.5%)	66(35.5%)	8(4.3%)	5(2.7%)	2(1.1%)		
1.6		Valid percent	56.5	35.5	4.3	2.7	1.1		

Source: Field survey, 2019

The above table 4.2 shows the attitude of employees towards spirit of lean manufacturing and out of the total 186, 43.5% of the respondents strongly disagree on the statement lean manufacturing is not as such important for the company. 38.7% of the respondents also disagreed to this premises; 8.6% of the respondents were neutral while 7.5% and 1.6% of the respondents agreed and strongly agreed on the statement. This indicates that the majority of the respondent's doesn't support this premises and this implies that spirit of lean manufacturing that means organizing activities is important for operational performanceby waste minimization and increased productivity of the company.

For the second question, only 61.8% and 2.2% of the whole respondents disagreed and strongly disagreed on that the company organizes its internal unit operation processes; 7.5% of the respondents were neutral while 26.9% of the respondents agreed and 1.6% of the respondents strongly agreed. This indicates that more than 60% of the respondent's think that cadila has a problem of organizing its internal processes and departments that creates a delay on production of products having a negative impact on the daily output of products and on their quality as well as on waste minimization.

The third premise was about the adoption of new technology in the company on modern manufacturing technique. Only 1.1 % of the respondents strongly disagreed and 45.7% of the respondents disagreed on this issue; 8.1% of the respondents were neutral to this question while 26.9% of the respondents agreed and 18.3% of the respondents strongly agreed on this question. This indicates that the company tries to adopt new technology to improve the quality of its products. Therefore the use of new technology increases automation leading to increased quality and compliance with regulation of standards of manufacturing.

On the issue of responding to changes , 6.5% of the respondents strongly disagreed to the question of rapid response to the process change of internal and external environment. The majority of the respondents which is 49.5% of the respondents disagreed. 10.2% of the respondents were neutral and 9.7% of the respondents strongly agreed and 24.2% of the respondents agreed and 7.3% of the respondents strongly disagreed on this premise. This clearly indicated that more than 50% of the respondents believe that processes cannot be easily and rapidly changed and not affected by the environment. Each process has its own standard operating procedure. This shows that the external environment does not affect the working condition of production of the

company because pharmaceutical companies operate under standard operating conditions and procedures.

The fifth question was about smooth flow and simplification of work. From 186 respondents Only 14.0% of the respondents strongly disagreed and 10.2% of the respondents disagreed ; 28.5% of the respondents were neutral to this question while 32.8% of the respondents agreed and 14.5% of the respondents strongly agreed on this question. This clearly indicates that the company has simplified works (unit operations). This simplification directly increases the productivity and also helps to use resources safely by reducing wastes that are generated by long manufacturing processes.

As we can see from the above table 4.2, 1.1% of respondents strongly agreed to the above premise (Process improvements made when ever needed). 2.7% of the respondents agreed; 4.3% of the respondent was neutral. 35.5% of the respondents disagreed and 56.5% of the respondents strongly disagreed to this premise. Almost all (92%) of the respondentsresponded by saying process improvements was made only when a problem happened means that no precaution is taken before the problem happens. This creates delay on manufacturing process leading reduced productivity of the company.

Table 4.2 shows the mean of shop floor operation is 2.1546 withstandard deviation of1.0254, which means that there is disagreement regarding organizing unit operations in the company that causes reduced productivity leading poor operational performance.

4.3.2-Performance setting and monitoring

Performance measurement of an employee is the key factor to accomplish the desired target. However, according to the research made the researcher understand that the performance measuring parameters are vague and does not measure the employee's ability of performing their tasks. The parameters stated on the performance appraisal can't be applied to all employees in different departments. In addition the performance parameters are not understood by employees and not regularly checked resulting conflict between workers and their immediate supervisors.

Table 4.3 Performance measurement in the company

S.N	Questions	response rate	Level of agreement					Mean	S/D
			SD	D	N	A	SA		
	Performance measure is vital for better achievements of the company	Frequency	2(1.1%)	12(6.5%)	9(4.8%)	56(30.1%)	107(57.5%)		
2.1		Valid percent	1.1	6.5	4.8	30.1	57.5		
	Performance measures defined, understood, and private, or well-defined, clearly communicated, and made public.	Frequency	27(14.5%)	87(46%)	20(10.8)	39(21.0%)	13(7.0%)		
2.2		Valid percent	14.5	46	10.8	21.0	7.0		
	Your performance is measured regularly by your immediate supervisor	Frequency	37(19.9%)	123(66.1%)	8 (4.3%)	14(7.5%)	4 (2.2%)		
2.3		Valid percent	19.9	66.1	4.3	7.5	2.2		
	Your performance does not affect the performance of the entire organization.	Frequency	53 (28.5%)	102(54.8%)	17 (9.1%)	9(4.8%)	5(2.7%)	2.4525	0.94624
2.4		Valid percent	28.5	54.8	9.1	4.8	2.7		
	You receive feedback from your immediate supervisor on how well or poorly you have performed your tasks.	Frequency	16(8.6%)	95(51.1%)	13(7.0%)	41(22.0%)	21(11.3%)		
2.5		Valid percent	8.6	51.1	7.0	22.0	11.3		
	You are committed to improve your performance.	Frequency	1(0.5%)	4(2.2%)	8(4.3%)	73 (39.2%)	100(53.8%)		
2.6		Valid percent	0.5	2.2	4.3	39.2	53.8		

Source: Field survey, 2019

Table 4.3 shows that performance measures have an impact on the success of the company. As we can see 1.1% of respondents strongly disagreed with this premise but only 6.5% the respondents disagreed and 4.8% of the respondents were neutral. 30.1% of the respondents agreed to the fact that performance measure of employees is vital and 57.5% of the respondents strongly agreed to this. This implies that the success of the company highly dependent on the performance of its employees to have better productivity and improved quality of products.

The next issue was about performance measurement parameters. Table 4.3 shows that 14.5% respondent that strongly disagrees with this question.46.8% the respondents disagreed and 10.8% of the respondents were neutral. 21.0% of the respondents agreed to the fact that Performance measures defined, understood, and private, or well-defined, clearly communicated, and made public and 7.0% of the respondents strongly agreed to this. The above figure shows that most of employees does not understand the parameters on the performance appraisal and not well defined. From the interview session, the researcher understands that Performance appraisal of employees is filled and salary increment is done annually. Most employees agree that performance has no effect on their annual increment of their salary. There is no trend of salary increment based on performance of employees. This trend of the company made the employees to be de-motivated and perform less than expected leading to low productivity of the company.

Out of the 186 respondents 19.9% strongly disagree and 66.1% disagree on regular performance measurement in the company.4.3% of the respondents were neutral. But the rest 7.5% agree and 2.2% of the respondents believe that their performance is regularly checked by their immediate leader. As we can see from the above figure majority (86%) number of employees disagree on regular performance measurement. This indicates that the company has no mechanisms of controlling the performance of employees and managers as well as supervisors manage their subordinates remotely. This remote type of controlling employees caused low productivity due to time wastage by employees caused by poor management practice by managers.

The next item in the above table, 4.3 is about the individual performance of each employees.9.1% of the respondents were neutral on the issue regarding individual performance. 54.8% of the respondents agreed and 28.5% of the respondents strongly agreed. This indicates that the productivity of the company is highly dependent on employees performing unit operations. Therefore the contribution of each employee has a positive and significant effect on the productivity of the company.

According to the data presented in table 4.3.1, 0.5% of the respondents strongly disagreed and 2.2% of the respondents disagreed to the third premises which is the commitment to improve their performance. 4.3% of the respondents were neutral; 39.2% of the respondents agreed and 53.8% of the respondents strongly agreed to it. As we can see from the analysis majority (93%) of the respondents responded that they are highly committed to improve their performance to increase the productivity as well as to meet standards of manufacturing.

Table (4.3) shows that the mean of performance setting is 2.4525 with standard deviation of 0.94624, which means that there disagreement regarding performance appraisal and feedback from immediate supervisors. It caused de-motivation of employees leading to be ignorant to GMP and perform less than their potential leading poor output and non-compliance.

Regarding the application of management practices department managers of the company responded that the management body tries to practice some managerial functions. But the practices are not that much enough to manage employees in a manner that the managers and the employees want. The main reason is that the human resources department has no HR-manual to administrate employee. Managers face a problem on measuring the performance and rewarding an outstanding

employee. Every employee that they manage has complained on the performance measurement of the company due to vague measurement and no discussions are made after performance is appraised.

The absence of HR-manual caused a difficulty on the annual salary increment of the company and rewarding. Performance appraisal has no impact on the annual salary increment of the company. The annual increment is done sometimes based on scale of salary of employees or similar percent of increment is done to all level of employees. This problem leads to de-motivation of employees causing pressure on other departments not to achieve their desired plan.

In the context of planning, the company's production plan is revised frequently depending on the demand of the market. So it is difficult to achieve the overall target of the month.

4.3.3 Target setting or planning

Target setting or planning is the major management practice that is helpful to forecast the destination of an organization. Planning is the process of formulating a strategy to reach the company's target.

Table 4.4 Planning in the company

SN	Questions	response rate	Level of agreement					Mean	S/D
	Target setting has challenge on your achievements and company's success.		SD	D	N	A	SA	2.1230	.94519
		Frequency	106(57%)	68(36.6%)	7(3.8%)	4 (2.2%)	1(0.5%)		
3.1		Valid percent	57.0	36.6	3.8	2.2	0.5		
	Your company announces the monthly plan for concerned employees.	Frequency	40(21.5%)	110(59.1%)	15(8.1%)	16(8.6%)	5(2.7%)		
3.2		Valid percent	21.5	59.1	8.1	8.6	2.7		
	Discussions are made on the ways to achieve the targets and take necessary corrections.	Frequency	15(8.1%)	56(30.1%)	35(18.8%)	46(24.7%)	34(18.3%)		
3.3		Valid percent	8.1	30.1	18.8	24.7	18.3		
	You participate on planning of the overall target of your department.	Frequency	44(23.7%)	50(26.9%)	28(15.1%)	40(21.5%)	24(12.9%)		
3.4		Valid percent	23.7	26.9	15.1	21.5	12.9		

Source: Field survey, 2019

The above table 4.4 shows that most of employees do not know the weekly as well as monthly plan. This results from managers not announcing the monthly plan of the organization to employees. This creates a delay on achieving the target.

In the above table 4.4, 57% of the respondents strongly disagreed to the premise that target setting has positive impact on employee achievements and company's success and 36.6% of the respondents disagreed to it. 3.8% of the respondents were neutral while 2.2% of the respondents agreed and 0.5% respondents were strongly agreed. This indicates that setting a target is a main tool to improve the operational performance of the company.

The second item in the above table 4.4, 8.1% of the respondents were neutral on the issue regarding plan announcement of the organization. 59.1% of the respondents disagreed and 21.5% of the respondents strongly disagreed. This indicates that employees do not know what they performdaily. This directly affected the operational performance of the company.

According to the analysis made in the above table 8.1% of the respondents strongly disagreed and 35.4% of the respondents disagreed to the premises that discussions are made on the way of achieving target and taking necessary corrections 18.8% of the respondents of the respondents were neutral while 19.3% of the respondents agreed and 18.3% of the respondents strongly agreed to it. This shows us that most employees in the company does not discuss about the achievement of the target of the company. This shows that employees follow their own principles to do their work. This led to have less operational performance.

In the forth item of the above table 4.4, only 12.9% of the respondents strongly agreed in the participation of planning process.13.5% of the respondents disagreed to it and 7.3% of the respondents were neutral while the rest 47.8% of the respondents agreed and 29.2% of the respondents strongly agreed. This indicates that concerned employees and their subordinatesdon't participate on planning process. They simply accept the plan from highest level of management and only execute the plan accordingly. This type of implementation doesn't considered the ability of employees and finally lead to not achieve the plan.

Table 4.4 shows that the mean of target setting is2.1230 with standard deviation of 0.94519, which means that there disagreement regarding planning system of the company.This indicates that poor participation of employee in planning and absence of discussion about its achievement caused low operational performance of the company.

4.3.4-Incentive setting (rewarding)

Incentive based on performance is one way of motivating the workers to have belongness behavior and use their maximum ability and effort to increase the productivity. However, as shown on the figure above, about 60% of the respondents stated as they didn't have any incentive based on their performance. According to the interview made with officials incentive is not practiced in the company.

Table 4.5 Salary and reward system of the company

SN	Questions	response rate	Level of agreement					Mean	S/D
			SD	D	N	A	SA	2.4153	1.13643
4.1	Rewarding employees not contribute for the company's better achievements.	Frequency	90(48.4%)	66(35.5%)	15(8.1%)	7(3.8%)	8(4.3%)		
		Valid percent	48.4	35.5	8.1	3.8	4.3		
4.2	Qualified personnel is hired, developed and kept at the right position in the company.	Frequency	24(12.9%)	76(40.9%)	22(11.8%)	50 (26.9%)	14 7.5(%)		
		Valid percent	12.9	40.9	11.8	26.9	7.5		
4.3	Your company rewards employees with outstanding performance.	Frequency	69(37.1%)	46(24.7%)	22(11.8%)	37(19.9%)	12 (6.5%)		
		Valid percent	37.1	24.7	11.8	19.9	6.5		
4.4	Your company has organized salary and rewarding scale and Salary increments are affected on performance basis.	Frequency	51(27.4)	1015(54.3%)	17(9.1%)	15(8.1%)	2 (1.1%)		
		Valid percent	27.4	54.3	9.1	8.1	1.1		
4.5	The reward practice in the organization matches the performance of employees	Frequency	29(15.6%)	75(40.3%)	28(15.1%)	44(23.7%)	10(5.4%)		
		Valid percent	15.6	40.3	15.1	23.7	5.4		
4.6	During failure to achieve agreed responsibilities, accountable personnel, will be subjected to retraining or reassignment to other jobs.	Frequency	20(10.8%)	75(40.3%)	33(17.7%)	39(21.0%)	19(10.2%)		
		Valid percent	10.8	40.3	17.7	21.0	10.2		

Source: Field survey, 2019

As the above table 4.5 shows, majority of employees (83%) agree on the importance of reward on better achievement of the company.

The second item in the above table 4.5, 11.8% of the respondents were neutral on the issue regarding qualification and job assignment in the organization. 40.9% of the respondents disagreed and 12.9% of the respondents strongly agreed. This indicates that qualified personnel is not hired and allocated in the right position. The researcher understands that majorities of machine

operators and maintenance department workers are not well educated and they are learning an education which is unrelated with their work causing low performance of employees leads to reduced productivity.

According to the data presented in the above table 4.5 , 37.1% of the respondents strongly disagreed and 24.7% of the respondents disagreed to the second premisescompany rewards employees with outstanding performance. 11.8% of the respondents were neutral; 19.9% of the respondents agreed and 6.5% of the respondents strongly agreed to it. As we can see from the analysis majority (61.8%) of the respondents responded that there was no reward in the history of the company. This directly causes the employees to be de-motivated and affects the productivity as well as regulation compliance of the organization.

In the forth item of the above table 4.5, 27.4% of the respondents strongly disagreed to the fact that the company has organized salary scale and rewarding policy; 54.3% of the respondents disagreed to it and 9.1% of the respondents were neutral while the rest 8.1% of the respondents agreed and 1.1% of the respondents strongly agreed. This indicates that majority of the respondents think that the organization has no salary scale that means there is salary difference between employees having the same gob title and reward policy and practice doesn't match their performance. Thismade the employees to be de-motivated and negligent on their work causing poor productivity.

For the fifth question, only 15.6% and 40.3% of the whole respondents disagreed and strongly disagreed on the reward practice in the organization matches with the performance of employees; 15.1% of the respondents were neutral while 23.7% of the respondents agreed and 5.4% of the respondents strongly agreed. This indicates that more employees are de-motivated and unsatisfied due to absence of reward and salary was not affected by measured performance. This directly affects the productivity, quality and compliance to standards of manufacturing of the company due to employee dissatisfaction by their salary and absence of reward.

In the last item of the above table 4.5, 10.8% of the respondents strongly disagreed to retraining and reassignment of an employee when failed to achieve agreed responsibility and 40.3% of the respondents disagreed to it. 17.7 % of the respondents were neutral while 21.0% of the respondents agreed and 10.2% respondents were strongly disagreed. This indicates that

majority of the respondents think that the organization has the problem of retraining of low performer employees and also the company doesn't reassign and retrain an employee to a job in which he/she is interested on.Low performer employees were one of the causes for low productivity, resource wastage and create much non-compliance to the standards of manufacturing.

Table (4.5) shows that the mean of target setting is 2.4153 with standard deviation 1.13643, which means that there is some disagreement regarding salary and reward related issues of the company. Majority of employees have complain on the salary and reward system of the company.this directly and negatively affected the productivity , created lots of wastage and reduce the quality of products due to non-compliance to standards of manufacturing.

Some of the department managers responded that there are lots of challenges due to not rewarding employees and poor salary scale. Itincludes:

A - Absenteeism of employees causing delay of production

B - Lack of motivation of employees leading low performance

C - Turnover of employees resulting loss of qualified personnel

D –showing unethical behavior by employees due to lack of code of ethics.

The above mentioned problems directly affect the productivity through delay of production process and have impact on the standards of manufacturing that are caused by lack of motivation of employees resulting turnover that leads to high wastage at production process due to lack of skilled manpower and makes the working environment uncomfortable caused by unethical behaviors shown by some employeesthat generally resulting to poor operational performance.

To avoid such problems most department managers of the company have responded that they are trying to prepare HR-manual to overcome problems related to performance appraisal, reward system and planning and periodic discussions will be arranged between department managers in harmonizing the function of departments and managers will held discussion with concerned employees regarding the organization of operations to achieve better result. This effectively solves management problems that have impact on operational performance.

4.3.5 Meeting standards of manufacturing

A pharmaceutical manufacturing sector has its own production principles. Pharmaceutical companies should effectively meets the standards and use principles of good manufacturing

practice and principles in order to produce quality products. The premises, manufacturing machines, quality control, raw material and finished goods stores and others are very critical in order to manufacture pharmaceutical products. These important parameters are regularly and suddenly checked by authorized government body and international institutions that issue GMP-Certificate.

Table 4.6 Manufacturing standard of the company

SN	Questions	response rate	Level of agreement					Mean	S/D
	Legal pharmaceutical regulations of the country are important		SD	D	N	A	SA	2.8717	2.32670
		Frequency	2(1.1%)	2 (1.1%)	11(5.9%)	68(36.6%)	103(55.4%)		
5.1		Valid percent	1.1	1.1	5.9	36.6	55.4		
	The company meets legal pharmaceutical standards of manufacturing.	Frequency	7(3.8%)	9(4.8%)	43(23.1%)	70(37.6%)	57(30.6%)		
5.2		Valid percent	3.8	4.8	23.1	37.6	30.6		
	Your company is committed to proper storage conditions according to the specification	Frequency	6(3.2%)	19(10.2%)	36(19.4%)	91(48.9%)	34(18.3%)		
5.3		Valid percent	3.2	10.2	19.4	48.9	18.3		

Source: Field survey, 2019

Out of the total 186 respondents 1.1% of the respondents strongly disagreed and 1.1% of the respondents disagreed to the importance of legal pharmaceutical regulations of the country; 5.9% of the respondents were neutral while the rest 36.6% of the respondents agreed and 55.4% of the respondents strongly agreed. This shows that majority of the respondents believe that the company should be under strict supervision of concerned government authority. This helps to improve the standards of manufacturing.

According to the above table 4.6, only 3.8% employees strongly disagreed to the issue of meeting pharmaceutical standards but 4.8% of the respondents disagreed to it. 23.1% of the respondents were neutral while the rest 37.6% of the respondents agreed and 30.6% of the respondents strongly agreed. As it is shown in the analysis majority of the employees in the company agree on meeting international standards of good manufacturing process. Good manufacturing practice has direct impact on reduction of waste and productivity.

The last item in the above table 4.6, was the commitment to proper product storage conditions according to the specification and 3.2% of the respondents strongly disagreed and 10.2% of the respondents disagreed; 19.4% of the respondents were neutral and the rest 48.9% of the respondents agreed and 18.3% of the respondents strongly agreed to it. This indicates that pharmaceutical products of the company are kept under suitable temperature to maintain their quality for extended tome period.

Table 4.6 shows that the mean of standard of manufacturing is 2.8717 and standard deviation is 2.32670, which means that there isagreement about standards that should be followed in the company. This indicates that majority of employees of responded that the company tries to meet standards of manufacturing. But some of employees complain about meeting standards of manufacturing having negative impact on quality of products.

4.3.6 - Waste reduction

Reducing wastes have an impact on increased productivity of an organization. High amount of wastage of resources like water, electricity and raw materials caused high expense on the company leading poor profit. Cadila pharmaceutical uses its own ground water and plenty of water is used for washing machines and cleaning purpose. The effluent treatment plant (ETP) treats 125-150 cubic meter amount of water per day and releases to the environment.

Table 4.7 Minimization of waste in the company

SN	Questions	response rate	Level of agreement					Mean	S/D
			SD	D	N	A	SA		
6.1	Your company identifies the main sources of wastes.	Frequency	20(10.8%)	72(38.7%)	33(17.7%)	55(29.6%)	6(3.2%)	2.3581	1.09078
		Valid percent	10.8	38.7	17.7	29.6	3.2		
6.2	your company is seeking to reduce the wasteful use or resources (electricity, water, raw materials)	Frequency	22(11.8%)	130(69.9%)	13(7.0%)	14(7.5%)	7(3.8%)		
		Valid percent	11.8	69.9	7.0	7.5	3.8		
6.3	Alternatives actions taken to reduce the wastes in your organization.	Frequency	23(12.4%)	55(29.6%)	48(25.8%)	52(28.0%)	8 (4.3%)		
		Valid percent	12.4	29.6	25.8	28.0	4.3		
6.4	your company is working to reduce defective output (the proportion of damaged products)	Frequency	18(9.7%)	27(14.5%)	51(27.4%)	66(35.5%)	24(12.9%)		
		Valid percent	9.7	14.5	27.4	35.5	12.9		

Source: Field survey, 2019

As we can see from the above table 4.7, 10.8% of employees responded strongly disagrees on the identification of the main sources of wastes but 38.7% of the respondents disagreed to it; 17.7% of the respondents were neural while the rest 29.6% of the respondents agreed and 3.2% of the respondents strongly agreed. This indicated the majority number of the respondentswhich is 80.9% of the respondents supported this fact which is the company didn't notice the wastage sources and it is exposed to high loss of resources. Therefore the company loses high amount of resource causing profit loss.

In the second item of the above table 4.7 , 11.8% of the respondents strongly disagreed and 69.9% of the respondents disagreed on the company's commitment on reduction of wasteful use of resources; 7.0% of the respondents were neutral while the rest 7.5% of the respondents agreed and 3.8% of the respondents strongly agreed. This indicates that have a problem on the management of its wastes causing low productivity.

In the third item employees were asked if their organization takes alternative actions to reduce wastes and as we can see from above table 4.7 , 12.4% of the respondents strongly disagreed and 29.6% of the respondents disagreed to the premises and 25.8% of the respondents were neutral while the rest 28.0% of the respondents agreed and 4.3% of the respondents strongly agreed. This indicates that Cadila pharmaceuticals incurs lots of wastes while manufacturing its products and didn't take any actions to reduce them and also employees do not have a commitment to decrease wastes by using resources properly. This affected the productivity and caused the company to produce a product with high cost leading to low profit.

The last item in the above table 4.7 was on working hardly to reduce defective output and 9.7% of the respondents strongly disagreed and 14.5% of the respondents disagreed; 27.4% of the respondents were neutral and the rest 35.5% of the respondents agreed and 12.9% of the respondents strongly agreed to it. This indicates that the company gives attention to its products. The researcher understands from interview that products are sold if and only if they are approved by quality control department.

Table 4.7also shows the mean of waste reduction is2.3581 with standard deviation of 0.09078 which means that there is disagreement regarding reduction of wastes in the company.This directly affected the productivity of the company.

4.3.7-Increased productivity

The productivity of an organization can be increased through increasing the input and the number of employees. However Cadila pharmaceuticals produce its products by dividing the products in to batches. So if the company wants to increase its output of production it only increases the number of bathes produced with in the month and should effectively manage every activity done daily to achieve the intended target at the end of the month or year.

Table 4.8 Increasing the productivity of the company

SN	Questions	response rate	Level of agreement					Mean	SD
			SD	D	N	A	SA		
7.1	Your company has the ability to respond to changes in production volumes.	Frequency	4(2.2%)	10 (5.4%)	27 (14.5%)	101(54.3%)	44(23.7%)	3.1505	1.08997
		Valid percent	2.2	5.4	14.5	54.3	23.7		
7.2	your company is working on economy of scale (large-scale production to reduce the cost per unit)	Frequency	6(3.2%)	59(31.7%)	43(23.1%)	57 (30.6%)	21(11.3%)		
		Valid percent	3.2	31.7	23.1	30.6	11.3		
7.3	Your company tries to increase the volume of production through several mechanisms.	Frequency	1(0.5%)	145(78.0%)	14(7.5%)	18(9.7%)	8(4.3%)		
		Valid percent	0.5	78.0	7.5	9.7	4.3		

Source: Field survey, 2019

As we can see from the above table 4.8 ,2.2% responded strongly disagrees on company's ability to respond to changes in production volume but 5.4% of the respondents disagreed to it; 14.5% of the respondents were neural while the rest 54.3% of the respondents agreed and 23.7% of the respondents strongly agreed. This indicated the company can increase its volume of production by increasing the batches to be produced within the intended time. But working hours should not be wasted with machine problems (down times should be avoided) and employees should not waste their working hours doing their personal things.

In the second item of the above table 4.8, 3.2% of the respondents strongly disagreed and 31.2% of the respondents disagreed to the fact that the company is working on economy of scale; 23.1% of the respondents were neutral while the rest 30.6% of the respondents agreed and 11.3% of the respondents strongly agreed. This indicates that the company produce large amount of units per batches that significantly reducing the cost incurred per unit of product.

In the third item employees were asked if their organization uses other method to increase the volume of production and as we can see from table 4.8, 0.5% of the respondents strongly disagreed and 78.0% of the respondents disagreed to the premises and 7.5% of the respondents were neutral while the rest 9.7% of the respondents agreed and 4.3% of the respondents strongly agreed. This indicates that the company has a problem of increasing its volume of product other than increasing the batches.

Table 4.8 shows the mean of productivity is 3.1505 with standard deviation 1.08997, which mean that there is agreement about the productivity of the company.This indicates the company increases its volume of production by increasing the number of batches of products.

4.3.8 Compliance with country's regulations

All pharmaceutical companies are expected to fulfill the criteria of good manufacturing practice principles. This is strictly and regularly controlled by local and international authorized institutions. Ethiopia food, medicine and health control authority (EFMHCA) is an institution that controls the pharmaceutical manufacturing facilities and also process followed while producing several medicines.

Table 4.9 Application of GMP principles in the company

SN	Questions	response rate	Level of agreement					Mean	SD
			SD	D	N	A	SA		
8.1	You undergo training about standard operating procedures of operations and lean manufacturing.	Frequency	12(6.5%)	20 (10.8%)	45(24.2%)	82(44.1%)	27(14.5%)		
		Valid percent	6.5	10.8	24.2	44.1	14.5		
8.2	The methods used during training have impact on your skill.	Frequency	6(3.2%)	40(21.5%)	50(26.9%)	63(33.9%)	27(14.5%)		
		Valid percent	3.2	21.5 2	26.9	33.9	14.5		
8.3	The trainings received are relevant to your work.	Frequency	8(4.3%)	38(20.4%)	25(13.4%)	78(41.9%)	37(19.9%)		
		Valid percent	4.3	20.4	13.4	41.9	19.9		
8.4	Your company is committed to provide the production according to local and international standard like Good Manufacturing Practice (GMP).	Frequency	15(8.1%)	28(15.1%)	26(14.0%	95(51.1%)	22 (11.8%)	3.4355	1.12880
		Valid percent	8.1	15.1	14.0	51.1	11.8		
8.5	Your company effectively applies principles of GMP in its facility.	Frequency	15(8.1%)	73(39.2%)	29(15.6%)	58(31.2%)	11(5.9%)		
		Valid percent	8.1	39.2	15.6	31.2	5.9		

Source: Field survey, 2019

The above table 4.9 shows the practices done to fulfill the requirements and application of current good manufacturing practice the opinion of employees towards the company about its facility and manufacturing process and in Cadila pharmaceuticals (Ethiopia). Out of the total 186 respondents 6.5% of the respondents strongly disagreed and 10.8% of the respondents disagreed to the premises that employeesundergo training about standard operating procedures of operations and lean manufacturing. ; 24.2% of the respondents were neutral while the rest 24.2% of the respondents agreed and 14.5% of the respondents strongly agreed. This indicates that employees are well trained about each standard operating procedures and good manufacturing principles.

In the second item of the above table 4.9, 3.2% of the respondents strongly disagreed and 21.5% of the respondents disagreed to the fact that the training have impact on your skill.; 6.2% of the respondents were neutral while the rest 37.1% of the respondents agreed and 14.6% of the respondents strongly agreed. This indicates that most employees receive relevant training related with their work but have a problem of implementing while they perform their tasks. This affects the standard of manufacturing and productivity of the company.

In the third item employees were asked if the organization is committed to provide the production according to local and international standards and as we can see from table 4.9, 16.9% of the respondents strongly disagreed and 39.9% of the respondents disagreed to the premises and 15.7% of the respondents were neutral while the rest 22.5% of the respondents agreed and 5.1% of the respondents strongly agreed. This indicates that the company tries to work according to local and international standards.

The last item of table 4.9 is an effective application of good manufacturing practice in the company's facility and 8.1% of the respondents strongly disagreed and 39.2% f the respondents disagreed to this premises; 15.6% of the respondents were neutral while the rest 31.2% of the respondents agreed and 5.9% of the respondents strongly agreed. Most of employees disagree on effective application of GMP principles. This indicates that the company has the problem of implementing GMP principles.

Table 4.9 shows that the mean of application of GMP is 3.4355 with standard deviation 1.12880, which means majority of employees agreed regardingcompliance with standards of

manufacturingin the company. This greatly affects the quality as well as the productivity of the company.

Relationship between management practice and operational performance

Correlation coefficient statistics measure the degree to which two sets of numbers are related. A higher correlation coefficient signifies a stronger relationship. At one extreme, a correlation coefficient of 1.0 means a perfect positive relationship as one set of numbers goes up, so does the other. At the other extreme, a correlation of −1.0 means a perfect negative correlation—when one set of numbers goes up, the other goes down. In the middle, a correlation of 0 means there is no correlation at all.(Noe*et al*, 2011).So the researcher have made a correlation analysis to test to what extent how this variables are related. The researcher used Bivariate Pearson's Correlation (r) and between Independent and Dependent Variables.

Table 4.10 Bivariate Pearson's Correlation (r) between Independent andDependent variables

	Correlations									
			1	2	3	4	5	6	7	8
1	**Shop floor operation**	Pearson Correlation								
		Sig. (2-tailed)								
2	**Performance setting**	Pearson Correlation	1.000**							
		Sig. (2-tailed)	.000							
3	**Target setting**	Pearson Correlation	.582**	.582**						
		Sig. (2-tailed)	.000	.000						
4	**Incentive setting**	Pearson Correlation	.669**	.669**	.607**					
		Sig. (2-tailed)	.000	.000	.000					
5	**Compliance with regulation**	Pearson Correlation	.323*	.323*	.386**	.374**				
		Sig. (2-tailed)	.012	.012	.002	.003				
6	**Waste reduction**	Pearson Correlation	.590**	.590**	.656**	.612**	.453**			
		Sig. (2-tailed)	.000	.000	.000	.000	.000			
7	**Improved productivity**	Pearson Correlation	.529**	.529**	.555**	.413**	.381**	.531**		
		Sig. (2-tailed)	.000	.000	.000	.001	.003	.000		
8	**Meeting pharmaceutical standard**	Pearson Correlation	.337**	.337*	.297*	.399**	.521**	.426**	.418**	
		Sig. (2-tailed)	.008	.008	.011	.002	.000	.001	.001	

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

*. Correlation is significant at the 0.05 level (2-tailed).

As we can see from the above table 4.11 there is a significant relationship between management practice and operational performance. This indicates that these variables are related since majority of(Pearson Correlation) is greater than 0.5 and are also positively related meaning improved management practice leads to an increased operational performance. But two variables of operational performances that is compliance with regulation and meeting pharmaceutical standard are moderately related to management practice variables indicating they are moderately affected by the management practices.

The Influence of Management Practice on Operational performance

Regression is the determination of a statistical relationship between two or more variables. In simple regression, we have only two variables, one variable (defined as independent) is management practice and another one is (defined as dependent variable) operational performance. Regression analysis is a statistical method to deal with the formulation of mathematical model depicting relationship amongst variables which can be used for the purpose of prediction of the values of dependent variable, given the values of the independent variable.(Kothari, 2004) And as to this case the independent variable is management practice and the dependent variable is operational performance and the According to table 4.11 , 82.5% of the variation in operational performance explained by management practice exercised by the management body.

Table 4.11 Results of Multiple Regressions Analysis (ANOVA): Regressing management practice Variables Verses Operational Performance

Model	R	R Square	Adjusted R Square	Sig.
1	.780	.610	.611	.000[b]

Since $R^2$is 0.610 then the independent variable can explain 61.1% of variance on dependent variable, this indicates that management practiceelements have direct impact on operational performance at CadilaPharmaceuticals (Ethiopia) plc($\alpha \leq 0.05$).

Table 4.12 Results of Multiple Regressions Analysis (Coefficients): Regressing management practice against operational performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.321	.314		5.404	.000
	Shop floor operation	.029	.087	.027	4.336	.007
	Performance setting	.137	.066	.161	2.659	.003
	Target setting	.132	.082	.138	2.007	.010
	Incentive setting	.124	.084	.125	2.021	.041

Table 4.12 shows that there is a positive direct impact of shop floor operation on operational performance, since (Beta= 0.027, t=4.336, sig. 0.007, p<0.05) which indicates that shop floor operationis the least important variable from others and has an impact on operational performance at (α≤0.05).

Table 4.12 shows that there is a positive effect of performance settingon operational performance, since (Beta= 0.161, t=2.659, sig. 0.003, p<0.05) which indicates that performance setting is the first important factor from others andhas an impact on operational performance at (α≤0.05).

Table 4.12 shows that there is a positive direct impact of target setting on operational performance, since (Beta= 0.138, t=2.007, sig. 0.010, p<0.05) which indicates that target settingis the second important factor from others andhas impact on operational performance at (α≤0.05).

Table 4.12 shows that there is a positive effect of incentive setting on operational performance, since (Beta= 0.125, t=2.021, sig. 0.041, p<0.05) which indicates that incentive setting is the third important variable from others and has an impact on operational performance at (α≤0.05).

VIF (Variance Inflation Factor) and tolerance are used to test multi-collinearity. If VIF is less than 10 and tolerance is more than 0.2, the multi-colinearity model does not violate this assumption.

Table 4.13 Multi-colinearity analysis

Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
1	Shop floor operation	.554	1.804
	Performance monitoring	.818	1.222
	Target setting	.502	1.991
	Incentive setting	.470	2.129

Dependent Variable: operational performance

Table 4.13 above results also shows that the VIF values are less than 3.3 and the tolerance values are more than 0.2. This indicates that there is no multi-collinearity within the independent variables of the study.

CHAPTER FIVE

SUMMARY, CONCLUSIONS &RECOMMENDATIONS

5.1. Summary of Major Findings

This research was conducted tofind out the effects of management practices on the operational performance of Cadila pharmaceuticals (Ethiopia)plc.The major finding includes the following:questions .What is the extent of management practice in Cadila pharmaceuticals (Ethiopia) plc?What the extent of operational performance of Cadila pharmaceuticals (Ethiopia) plc?How the management practice and operational performance are related? How management practices influence operational performance?To answer these questions, questionnaire was developed and distribute to hundred eighty-six employees of Cadila pharmaceuticals (Ethiopia) plc.

According to the data collected through questionnaires and interview the major finds of the study are presented as follows:

- With regard to intention of management practice**,** Cadila pharmaceuticals (Ethiopia) plc management staff does not exercise management practices in better way for the achievement of the plan. This has greater impact on their operational performances.
- The data indicates that Cadila pharmaceuticals (Ethiopia) plc have a problem on managing its internal operations, performance appraisal of employees, planning and rewarding employees. Means most of employees have no idea about spirit of lean manufacturing also the company has poor performance appraisal system and no salary scale. In addition no incentives were given before and employees have no idea what will be worked with in the month (plan of the company).
- The data shows that the way of implementation management practices is highly related to the performance of the company meaning effective implementation of management practices leads to better operational performance of the company.
- Most of the respondents do not believe that the company did not meet its productivity, waste reduction and standards of manufacturing due to problem of implementation of basic management practices.

- Majority of the respondents agree that the performance of the company is highly affected by management practice which is not well exercised by department managers.

5.2 Conclusions

The study is to examine the effect of management practices on the operational performance of cadila pharmaceuticals (Ethiopia) plc. Thus,it was not well practiced by management and human resource department.

The researcher has undertaken an in depth analysis over this area of topic and found out that there is a significant importance of management practice variables in the organization.

The study revealsthat management practices shop floor operation or organizing internal activitiesis not well done by department managers resulting poor operational performance of the company.It also reveals that internal manufacturing processes are not improved periodically and process improvements are done only problem arises.

The study also reveals that vague and ambiguous and performance measurement or appraisal and also frequency of performance appraisal system of the company are the other problems. Inaddition to that immediate supervisors doesn't discuss with their subordinates regarding the performance measurement parameters and don't have the opportunity to give feedback on the workers performance.The result also indicates that the supervisors in the organization does not have the knowledge about the criteria and dimensions of evaluating the performance of workers, in addition they don't apply the standard criteria regularly for the growth and development of the organization.

The study also reveals that the plan of the company is done with out participation of employees, not well communicated and also not discussed with concerned employees about the means to achieve it.

In the intention of incentive, the result shows that salary increment is not based on the performance of employees, the company has no reward system and also qualified personnel is not allocated specially in the manufacturing and maintenance departments.

Finally, the findings indicated that the existing management practices were not implemented well and practicing these management tools can significantly improve the operational performance of the company.The study ends with a recommendation forcadila pharmaceuticals (Ethiopia) plc towards the improvement of management practices to improve its operational performance.

5.3. Recommendations

Based on the results of this study, the following alternative solutions and strategies are suggested to exercise better management practice for best operational performance.

- The Company should organize unit operationsby creating chain of activities in order to have completed out put. This process can significantly decrease the time consumption taken for producing a single finished product which results in increased productivity.
- In addition the company should fix machine problems immediately as soon as they occur to reduce the time wasted due to maintenance process.
- The human resource department should revise the performance appraisal system in such a way that every worker gets equal and unbiased benefit based on their performance. The performance of each employee has to be periodically checked and inspected. The HR department should set clear performance appraisal parametersand also prepare performance appraisal format based on different job titles or job descriptions,
- The human resource department should launch an outstanding employee rewarding systemtomakes employees to be hard workers and forces them to exert their maximum potentials in order to win the incentive given by the company.
- The Company should set a salary scale for employees according to their qualifications, job titles and experience. So that every employee knows his/her salary and job title depending on the qualification and experience he/she possess.
- Department heads, on recruiting process, should assign right person at the right position based on employees'qualification and knowledge about a task he/she is assigned. However allocating and training of qualified personnel enables the company to effectively use its production time by avoiding break down resulted from poor operators ability and machine malfunctioning.

- The Company should monthly announceitsplanto concerned employeesthrough inter office memo in order to make themalert and keepthem on the right track. Informing the short term production plan of the company to concerned employees and making discussion on the way of achieving them have greater impact to improve the operational performance.

REFERENCES

Arbós, C. (2002). Design of a rapid response and high efficiency service by lean production principles: methodology and evaluation of variability of performance. *International Journal of Production Economics*, 80 (2), 169-183.

Aruna S. Gamage(2015),The Role of HRM in Improving Labour Productivity: An Analysis of Manufacturing SMEs in Japan, Sri Lankan *Journal of Human Resource Management*.Vol.5, No.1.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17 (1), 99-120.

Barney, J. (2001). Is the resource-based 'view' a useful perspective for strategic management research? Yes. Academy of Management Review, 26 (1), 41-56.

Becker, B. E., &Huselid, M. A. (1998). High performance work systems and firm performance: A synthesis of research and managerial implications. Research in Personneland Human Resources Journal, 16(1), 53–101.

Bloom, N., Sadun, R., & Van Reenen, J. (in press). Americans do I.T. better: US multinationals and the productivity miracle. American Economic Review.

Bloom, N., Schweiger, H., & Van Reenen, J. (2011).The land that lean manufacturing forgot? Management practices in transition countries (Working Paper Series No. 17231). Cambridge, MA: National Bureau of Economic Research.

Bloom, N., & Van Reenen, J. (2007). Measuring and explaining management practices across firms and countries. Quarterly Journal of Economics, 122(4), pp 1351–1408.

Bloom, N., & Van Reenen, J. (2011).Human resource management and productivity.In O. Ashenfelter& D. Card (Eds.), Handbook of labor economics (vol. 4B, pp. 1697–1769).

Drucker, Peter F. The Practice of Management. New York: Harper & Row, 1954.Evaluating education policies: The evidence from economic research (Paper No. CEPEA008). London: Centre for Economic Performance.

Gantt, Henry(1961)Gantt on Management. Edited by Alex W. Rathe. New York: American Management Association.

Griffith, R., Haskel, J., and Neely, A. (2006). Why is productivity so dispersed? Oxford Review of Economic Policy, 22(4):pp-513.

Kamal birdi,(2008).The impact of human resource and operational management practices on company productivity: a longitudinal study, personnel psychology, 61, 467–501

Kirkley, J., Squires, D., and Strand, I. E. (1998).Characterizing managerial skill and technical efficiency in a fishery.*Journal of Productivity Analysis*, 9(2): pp145–160.

Kothair, C.R., (2004). Research Methodology: Methods and Techniques, 2nd revised ed, New Age International (P) Ltd., Publishers Published by New Age International (P) Ltd, India

Koontz, Harold (1972), and O'Donnell, Cyril.Principles of Management. New York: McGraw-Hill

Mefford, R. N. (1986). Introducing management into the production function.The Review of Economics and Statistics, 68(1):96–104.

McKinsey & Company. (2009). Management matters in Northern Ireland and the Republic of Ireland.

Muhammad Hamid, Impact of Human Resource Management on Organizational Performance,Journal of Accounting &Marketing.

Nelson, R. R., &Winter, S. G. (1982). An evolutionarytheory of economic change.Cambridge, MA: Belknap Books of Harvard University Press.

Noe, R. A., Hollenbeck, J.R., Gerhart, B. & Wright, P. M., (2011), Fundamental of Human resource Management, 4th ed, New York, McGraw Hill

Osterman, P. (1994). How common is workplace transformation and who adopts it? Industrial and Labor RelationsReview, 47(2), 173–188.

P.V.C.Okoye and Raymond A. Ezejiofor.(2013).The Effect of Human Resources Development on Organizational Productivity,International*Journal of Academic Research in Business and Social Sciences* , Vol. 3, No. 10

RamazanYılmaz.(2015).The effect of human resources management on organizational performance, 2(44): 5-13

Siegel, D. S., & Simons, K. (2010).Assessing the effects of mergers and acquisitions on firm performance, plant productivity, and workers: New evidence from matched employer-employee data.Strategic Management Journal,31, 903–916.

Skinner, J., &Staiger, D. (2009).Technology diffusion and productivity growth in health care (Working Paper SeriesNo. 14865). Cambridge, MA: National Bureau of EconomicResearch.

SohelAhmada,Roger G. Schroeder(2003) ,The impact of human resource management practices on operational performance: recognizing country and industry differences, Journal of Operations Management 21 19–43.

Syverson, C. (2011). What determines productivity? *Journal of Economic Literature*, 49(2):326–365.

Urwick, Lyndall F. and Brech, E.F.L. (1952).The Making of Scientific Management. London: Sir Isaac Pitman &Sonc.

Urwick, Lyndall F (1956).The Golden Book of Management. London: Newman Neame,

Washburn, N., Waldman, D., & Sully de Luque, M. (2009). Agents behaving like stewards: Executive discretion and the display of steward behaviors. Paper presented at the 69th Annual Meeting of the Academy of Management, Chicago, IL.

Winter, S. G. (2003).Understanding dynamic capabilities. Strategic Management Journal, 24(10), 991–995.

AppendixI
Questionnaires

St. Mary University

School of Graduate Studies

Masters of business administration

Questionnaire to be filled by Cadila Pharmaceuticals Plc employees

Dear respondent,

The purpose of this questionnaire is to collect data about **"The effect of management practice on operational performance in the case ofCadila pharmaceuticals (Ethiopia) plc"**for the partial fulfillment of Masters Degree in Business Administration and general management. The information you provide will be used only for academic purpose and kept confidential. Therefore, I kindly request you to provide reliable information for the quality of the research work.

Thank you in advance for your cooperation.

HaileyesusRegassa

General Direction

No need to write your name

Read each question and put (√) on the given box.

Demographic information

Gender: □ Male □ Female

Age (years): □ 25 – 35 □Between 35 – 45 □ Between 45 - 55 □above 55

Marital status:□Married □ Single □ Divorced

Education: □ high school □ Diploma □ Bachelor □ Masters Degree

Position: □ High level □ Middle level □ Supervisors □ worker

Division: □ Production □ Human Resource □ Warehouse□ QA/QC □ Engineering□others

Years of experience: □ Less or equal 5 □ Between 5 – 10 □ Between 10 – 15 □ Above 15

Part Two: Please put tick (√) in the table provided for each of the given statement using the following scales.

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

I	**Shop floor operations (lean manufacturing or organizing activities)**	1	2	3	4	5
1.1	Spirit of lean manufacturing is not as such important for the productivity of the company					
1.2	The company organizes its internal processes in a manner to shorten					

	performing activities (layout)					
1.3	Modern manufacturing techniques are adopted to meet business objectives like reducing costs and improving quality.					
1.4	The company possesses the ability to respond rapidly to changes in the work Environment (internal and external changes)					
1.5	The company has smooth flow of work and simplifying operational structure of the work.					
1.6	Process improvements made only when ever needed.					
II	**Performance Monitoring**					
2.1	Performance measures is vital for better achievements of the company					
2.2	Performance measures defined, understood, and private, or well-defined, clearly communicated, and made public.					
2.3	Your performance is measured regularly by your immediate supervisor					
2.4	Your performance affects the performance of the entire organization.					
2.5	You receive feedback from your immediate supervisor on how well or poorly you have performed your tasks.					
2.6	You are committed to improve your performance.					
III	**Target setting**					
3.1	Target setting has a challenge on your achievements and company's success.					
3.2	The company announces the monthly plan for concerned employees.					
3.3	Discussions are made on the ways to achieve the targets and take necessary corrections.					
3.4	You participate on planning of the overall target of your department.					
IV	**Incentive setting**					
4.1	Rewarding employees not contribute for the company's better achievements.					
4.2	Qualified personnel is hired, developed and kept at the right position in the company.					
4.3	The company reward employees with outstanding performance.					
4.4	The company has organized salary and rewarding scale and Salary increments are affected on performance basis.					
4.5	The reward practice in the organization matches the performance of employees					
4.6	During failure to achieve agreed responsibilities, accountable personnel, will be subjected to retraining or reassignment to other jobs.					
V	**Compliance with regulations**					
5.1	Legal pharmaceutical regulations of the country are important.					
5.2	The company meets legal pharmaceutical standards of manufacturing.					
5.3	The company is committed to proper storage conditions according to the specification					
VI	**Waste reduction**					
6.1	The company identifies the main sources of wastes.					
6.2	The company is seeking to reduce the wasteful use or resources (electricity, water, raw materials)					

6.3	Alternatives actions taken to reduce the wastes in your organization.					
6.4	The company is working to reduce defective output (the proportion of damaged products)					
VII	**Increased productivity**					
7.1	The company has the ability to respond to changes in production volumes.					
7.2	The company is working on economy of scale (large-scale production to reduce the cost per unit)					
7.3	The company tries to increase the volume of production through several mechanisms.					
VIII	**Meeting pharmaceutical standards of manufacturing(Compliance)**					
8.1	You undergo training about standard operating procedures of operations and lean manufacturing.					
8.2	The methods used during training have impact on your skill.					
8.3	The trainings received are relevant to your work.					
8.4	The company is committed to provide the production according to local and international standard like Good Manufacturing Practice (GMP).					
8.5	The company effectively applies principles of GMP in its facility.					

If you have any related comments please specify here.

_____
_____
_____
_____
_____
_____.

Thank You!

AppendixII

Interview Questions

1. Do you think that management practices are exercised in the company?
2. Can you list some challenges the department has faced due to implementation of management practice related with performance?
3. To what extent does management practice affects the performance of the organization and what is your attitude towards it?
4. What kind of techniques has the company practiced to overcome problem on operational performance?