

TBP – TARGET BUSINESS PLANNING OF BOSCH pvt ltd.
Submitted in partial fulfilment of the requirements for the award of

MASTER OF BUSINESS ADMINISTRATION

by

Dharshini K

REGISTER NO:42410224



**DEPARTMENT OF BUSINESS ADMINISTRATION SCHOOL OF
MANAGEMENT STUDIES**

**SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

**Accredited with Grade “A++” by NAAC | 12B Status by UGC | CATEGORY -1
UNIVERSITY BY UGC | Approved by AICTE JEPPIAAR NAGAR, RAJIV GANDHI
SALAI, CHENNAI - 600 119**



SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CATEGORY - 1 UNIVERSITY BY UGC**

DECLARATION

Dharshini K (42410224) hereby declare that the Project Report entitled **“TBP- TARGET BUSINESS PLAN OF BOSCH pvt ltd.”** done by me under the guidance of **SHAHINA BEGUM MS** is submitted in partial fulfilment of the requirements for the award of Master of Business Administration degree.

DATE:

PLACE:

Dharshini K



SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CATEGORY - 1 UNIVERSITY BY UGC**

SCHOOL OF MANAGEMENT STUDIES

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work **Dharshini K (42410224)** who carried out the Project Training “**TBP – Target Business Planninf in BOSCH pvt ltd** “ under my supervision from October 2023 to December 2023.

SHAHINA BEGUM MS

Internal Guide

External Guide

Dr. G. Bhuvaneswari

Dean – School of Management Studies

Submitted for Viva voce Examination held on _____

**Internal Examiner
Examiner**

External



INTERNSHIP COMPLETION CERTIFICATE

30 October 2023

TO WHOMSOEVER IT MAY CONCERN

We are glad to inform you that Ms. **DHARSHINI K (42410224)** from **Sathyabama Institute of Science and Technology** has successfully completed her internship at **Bosch Limited, Power Tools Manufacturing Plant, Oragadam** (From 19th September 2023 to 19th October 2023).

During her internship, she was exposed to the various activities in plant controlling functions.

We found her extremely good and hard working. She was interested to learn the functions of our core division and also willing to put her best effort and get into the subject to understand it better.

We wish her every success in life.

Thanking You,

For **Bosch Limited**


Pradeep Rajaram 30/10/23
Manager – Human Resources



BOSCH LIMITED (POWER TOOLS MANUFACTURING PLANT)
Plot No.A-20/2, SIPCOT Industrial Growth Centre, Oragadam, Sriperumbudur Taluk,
Kanchipuram, Tamil Nadu-602105.

ACKNOWLEDGEMENT

First, I would like to thank, the HR Department of **BOSCH (power tools division) Oragadam** for giving me the opportunity to do an internship within the organization.

I also would like all the people who taught me all about BOSCH, Oragadam with their patience and openness they created an enjoyable working environment.

It is indeed with a great sense of pleasure and immense sense of gratitude that I acknowledge the help of these individuals.

I would like to thank **Mrs. P. Prathima**, who has been my mentor throughout this internship period and also **Ms. Siva Priya**, **Mr. Nawaz sheriff** and **Mr. Naveen** for helping me to gain knowledge in the field of Costing.

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to Board of Management of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey my sincere thanks to **Dr. G. Bhuvaneswari, MBA., Ph.D., Dean - School of Management Studies** and **Dr. A. Palani, M.Com., M.Phil., M.B.A., Ph.D., - Head - School of Management Studies** for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to my Project Guide **Ms. Shahina Begum** for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the **School of Management Studies** who were helpful in many ways for the completion of the Training.

TABLE OF CONTENTS

CHAPTER NO	TITLE	Page no.
	ABSTRACT	x
	LIST OF TABLES	xii
	LIST OF CHARTS	xiii
1	INTRODUCTION	
	1.1 Introduction	1
	1.2. Industry profile	3
	1.3. Company profile	9
	1.4. Need of the study	20
	1.5. Objectives for the study	20
	1.6. Scope of the study	22
2	REVIEW OF LITERATURE	
	2.1 Review of Literature	24
3	RESEARCH METHODOLOGY	
	3.1 Research methodology	29
	3.2 Data collection	32
	3.3 Methods of data collection	32

4	DATA ANALYSIS AND INTERPRETATION	
	4.1 inventory data	34
	4.2 defect cost	36
	4.3 manpower data	39
	4 .4 quantitative analysis	44
5	FINDINGS, SUGGESTIONS AND CONCLUSION	
	5.1 Findings	47
	5.2 Suggestions	47
	5.3 Limitations of the study	48
	5.4 Conclusion	49
	REFERENCES	50

ABSTRACT

The finance department is crucial for organizational success, serving as the financial backbone and strategic navigator. This abstract outlines its pivotal role in managing budgets, ensuring regulatory compliance, optimizing financial processes, and providing insights for informed decision-making. The finance department strives to enhance fiscal efficiency, mitigate risks, and contribute to the long-term financial health of the organization.

Additionally, the finance department acts as a guardian of regulatory compliance, ensuring adherence to financial laws and standards. Through rigorous financial analysis and reporting, it provides stakeholders with clear insights, empowering informed decision-making at all levels of the organization.

Furthermore, the finance team actively collaborates with other departments, offering financial guidance and support for various projects and initiatives. Its commitment to risk management helps safeguard the organization's assets and reputation.

In summary, the finance department is a linchpin for the organization, contributing to its overall success by fostering financial health, compliance, and informed decision-making.

List of table

Table No.	Title of the table	Page No.
1.3.1	Rating of Bosch latest update table.	16
4.1.1	Inventory data of Bosch power tools.	34
4.1.2	Defect cost data of Bosch power tool.	35
4.1.3	Manpower reporting details of 2023.	41

List of Charts

Chart no.	Title of the chart	Page no.
1.2.1	Asian pacific power tool market report	8
1.2.2	Financial year associate of 2022 -2023	12
1.2.3	Performance overview of Bosch power tools	13
1.2.4	Ownership structure and organization:	15

Chapter 1

1.1 Introduction

Finance department of an organization plays a major role in smooth flow of process in organization.

The finance department in an organization plays a pivotal role in managing the financial aspects that contribute to the overall success and sustainability of the business. Its primary functions encompass financial planning, budgeting, and control, ensuring optimal utilization of resources.

1. Financial Planning:

- Develops strategic financial plans aligning with organizational goals.
- Forecasts future financial trends and assesses the financial impact of various business decisions.

2. Budgeting and Control:

- Prepares budgets that allocate resources efficiently across different departments
- Monitors and controls expenditures to ensure adherence to budgetary constraints.

3. Financial Reporting:

- Generates accurate and timely financial statements.
- Communicates financial performance to stakeholders, facilitating informed decision-making.

4. Compliance and Risk Management:

- Ensures adherence to financial regulations and compliance standards.
- Manages financial risks through strategies like insurance and derivatives.

5. Cash Flow Management:

- Maintains liquidity by managing cash flow effectively.
- Optimizes working capital to support day-to-day operations.

6. Investment Decision-making:

- Evaluates potential investments and projects for their financial viability.
- Recommends strategies to maximize returns on investments.

7. Audit and Internal Controls:

- Implements internal controls to safeguard assets and ensure accuracy in financial reporting.
- Facilitates external audits to verify financial records and compliance.

8. Tax Planning:

- Develops tax strategies to minimize the organization's tax liability.
- Ensures compliance with tax laws and regulations.

In essence, the finance department serves as the financial backbone of an organization, supporting decision-making processes, fostering financial stability, and contributing to long-term growth.

1.2 INDUSTRY PROFILE

Industrial profile

Industry profiles are found in many business databases. They provide information on current market forces and trends, analyze industry performance, identify leading companies, and gather aggregate financial data and forecasts

Companies:

Bosch India's competitors and similar companies include BorgWarner Technologies, Honeywell International, Siemens Global and Whirlpool.



The global power tools market size was valued at \$26.61 billion in 2022 & is projected to grow from \$27.51 billion in 2023 to \$36.82 billion by 2030

Market Overview:

A power tool is a tool that uses additional power and a different mechanism from hand tools, which are only used manually. Power tools are those hand tools that are either operated electrically or pneumatically. Power tools reduce arduous, manual labor by having unique features like electric motors. While most power tools use electricity as the source, some contain pneumatic motors, such as air hammers and impact

wrenches. Power tools are widely used in commercial, residential and industrial settings. Power tools are available in portable and stationary types and thus the consumer can choose from them depending on the applications. Portable power tools have a benefit in terms of mobility. Power tools have been valuable resources for many businesses for a long time, assisting people from many different professions.

Competitive Analysis:

The big players are now focused on implementing joint ventures, product innovations, mergers and acquisitions, and partnerships to gain market share and strengthen their global power tools industry position.

In October 2021, one of Stanley Black and Decker's brands, Dewalt, announced the launch of a next-generation cordless power tool, DEWALT POWERSTACK 20V MAX.

List of Key Market Players:

- Atlas Copco AB
- Hilti Corporation
- Emerson Electric Co.
- Ingersoll-Rand plc.
- Snap-on Incorporated
- Makita Corporation
- Koki Holdings Co., Ltd.
- Robert Bosch GmbH
- Techtronic Industries Co. Ltd.
- Stanley Black & Decker Inc.

Key Target Audience

- Automotive Industries
- Construction industry
- Aerospace Industries
- Ship Building Industries

- Research & Development Organizations

Power Tools Market Analysis by Application Power tools are majorly used automotive, construction, aerospace, and logistics sectors. Increased technological innovation and adoption of advanced technologies are some of the key factors making industrial segment dominant over residential segment.

The global power tools market size was valued at \$26.61 billion in 2022 & is projected to grow from \$27.51 billion in 2023 to \$36.82 billion by 2030

Market Analysis of Different Segments Covered in the Report

Product

- Drills
- Saws
- Wrenches
- Grinders
- Sanders
- Others

Global Power Tools Market Competitive Analysis

- Hilti Corporation
- Makita Corporation
- Stanley Black & Decker
- Emerson Electric, Co
- Ingersoll-Rand PLC

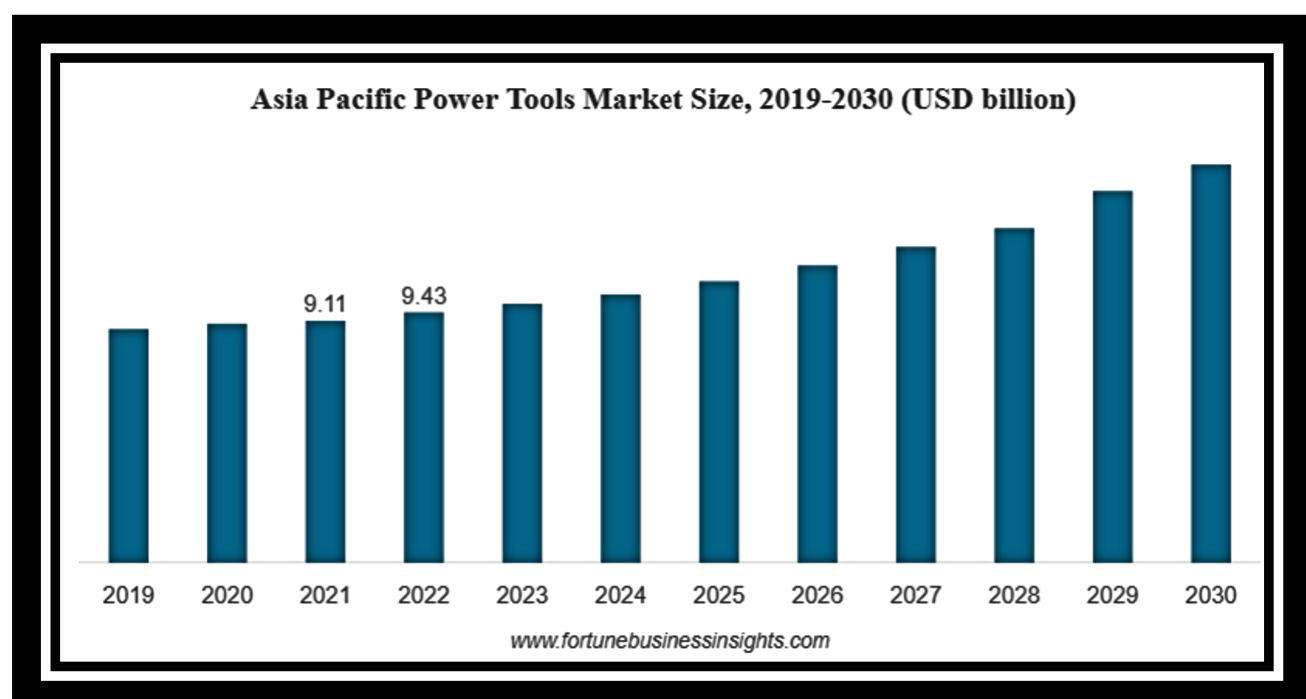
- Robert Bosch
- Techtronic Industries
- Koki Holdings Co., Ltd.

LOGO of competitive companies :



Power Tools Market Report Coverage

Report Attribute	Details
Forecast Period	2021-2030
The market size value in 2021	\$35.63 Billion
The revenue forecast in 2030	\$55.89 Billion
Growth rate	5.13%
The base year for estimation	2021
Historical data	2017 - 2020
Unit	USD Billion, CAGR (2021 - 2030)
Segmentation	Product, By Mode of Operation, By Application, By Region
By Product	Drills, Saws, Wrenches, Grinders, Sanders, Others
By Mode of Operation	Electric(Corded, Cordless),Pneumatic, Others
By Application	Industrial, Residential
By Region	U.S, Mexico, Canada, and the Rest of North America
Country Scope	U.S., Canada, France, Germany, U.K., China, Japan, India, South Korea, Mexico, Brazil, U.A.E., etc.
Company Usability Profiles	Hilti Corporation, Makita Corporation, Stanley Black & Decker, Emerson Electric, Co, Ingersoll-Rand PLC, Robert Bosch, Techtronic Industries, Koki Holdings Co., Ltd.





1.3 BOSCH COMPANY PROFILE

INTRODUCTION:

Bosch Power Tools is a renowned global leader in the design, manufacturing, and distribution of high-quality power tools and accessories. With a rich history dating back over a century, Bosch has established itself as a trusted name in the power tools industry, known for its innovative technologies and commitment to excellence.

Founded in Stuttgart, Germany in 1886, Bosch has grown into one of the world's largest and most respected providers of power tools. The company's extensive product portfolio encompasses a wide range of tools, including drills, saws, grinders, sanders, and much more. Whether it's for professional use on construction sites or for personal projects at home, Bosch Power Tools offers reliable and durable solutions to meet the diverse needs of its customers.

Bosch is driven by a strong dedication to quality and performance. The company continuously invests in research and development to create cutting-edge tools that enhance productivity, efficiency, and safety. Bosch's commitment to sustainable manufacturing practices is evident in its eco-friendly initiatives, such as energy-efficient production processes and the use of environmentally friendly materials.

Furthermore, Bosch Power Tools places great emphasis on user experience and ergonomics. The company understands the importance of comfort and ease of use, ensuring that their tools are not only powerful and efficient but also designed with the user in mind. This customer-centric approach has earned Bosch a loyal customer base and numerous accolades for its product design and innovation.

In addition to its product offerings, Bosch provides comprehensive support and services to its customers. This includes technical assistance, training programs, and a network of authorized service centers, ensuring that users can rely on Bosch for on-going support and maintenance.

Through its dedication to quality, innovation, and customer satisfaction, Bosch Power Tools has become a trusted partner for professionals and DIY enthusiasts alike. With a global presence and a commitment to excellence, Bosch continues to shape the power tools industry and empower individuals to achieve their goals efficiently and effectively.

Company was founded by Robert Bosch in Stuttgart in 1886. Bosch is 94% owned by the Robert Bosch Stiftung, a charitable institution.

Headquarters: Gerlingen, Germany

Customer service: 080675 21111

Parent organization: Robert Bosch Stiftung

Founder: Robert Bosch

Founded: 15 November 1886, Stuttgart, Germany

CEO: Stefan Hartung (1 Jan 2022–)

Subsidiaries: BSH Hausgeräte, Bosch Rexroth, MORE

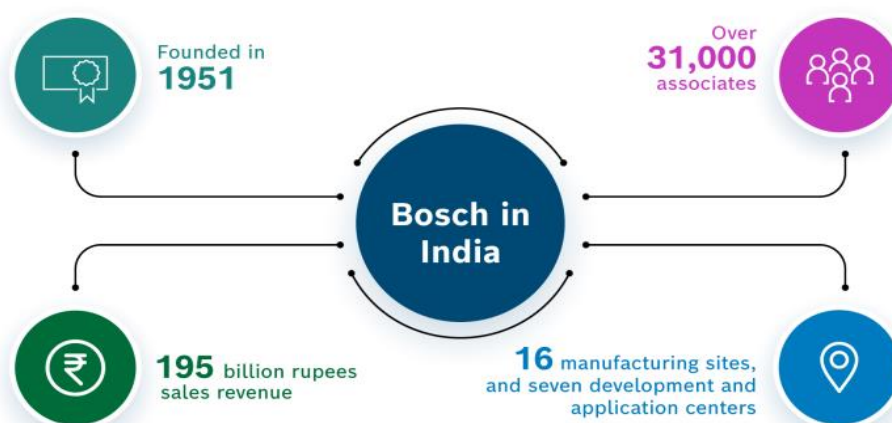
About Bosch in India

In India, Bosch is a leading supplier of technology and services in the areas of Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building

Technology. Additionally, Bosch has in India the largest development center outside Germany, for end-to-end engineering and technology solutions. The Bosch Group operates in India through twelve companies: Bosch Limited – the flagship company of the Bosch Group in India – Bosch Chassis Systems India Private Limited, Bosch Rexroth (India) Private Limited, Bosch Global Software Technologies PVT LTD, Bosch Automotive Electronics India Private Limited, Bosch Electrical Drives India Private Limited, BSH Home Appliances Private Limited, ETAS Automotive India Private Limited, Robert Bosch Automotive Steering Private Limited, Auto mobility Services and Solutions Private Limited, Newtech Filter India Private Limited and Miviv Eng. Technologies Private Limited. In India, Bosch set-up its manufacturing operation in 1951, which has grown over the years to include 16 manufacturing sites, and seven development and application centers.

Facts and figures

The Bosch Group in India employs over 30,000 associates and generated consolidated sales of about Rs.11,781 crores* (1.39 billion euros) in fiscal year 2021-22 of which Rs.10,264.3 crores* (1.21 billion euros) are from consolidated sales to third parties.



Associates:



PERFORMANCE OVERVIEW:

Financial Year 2022-23 Performance overview

 **INR 122.1 bn**

Mobility Solutions
+29.6%

INR 149.29 bn

**Bosch Limited Revenue for
FY 2022-23**

INR 14 bn 

Consumer Goods
+10.8%

 **INR 3.8 bn**

Energy and Building Technology
+32.5%

*Without other activities



Board of directors:

10 BOSCH

COMPANY OVERVIEW | BUSINESS OVERVIEW | ESG | NOTICE | STATUTORY REPORTS | FINANCIAL STATEMENTS 11

Board of Directors

The strategic guidance of visionary leaders

The extensive industry knowledge and diverse expertise of the Board members at Bosch contribute significantly to the Company's formidable position across multiple industries and business segments.

Their invaluable guidance plays a pivotal role in consolidating and strengthening Bosch's leadership in the sectors it serves.



Bhaskar Bhat
Lead Independent Director



Markus Bamberger
Chairman



Soumitra Bhattacharya
Managing Director (up to 30.06.2023)
Chairman (from 02.08.2023)



Guruprasad Mudlapur
Joint Managing Director and Chief
Technology Officer (up to 30.06.2023)
Managing Director and Chief Technology
Officer (from 01.07.2023)



S. V. Ranganath
Independent Director



Hema Rathi-Bhandari
Independent Director



Gopichand Katragadda
Independent Director



Sandeep R.
Executive Director (up to 30.06.2023)
Joint Managing Director
(from 01.07.2023)



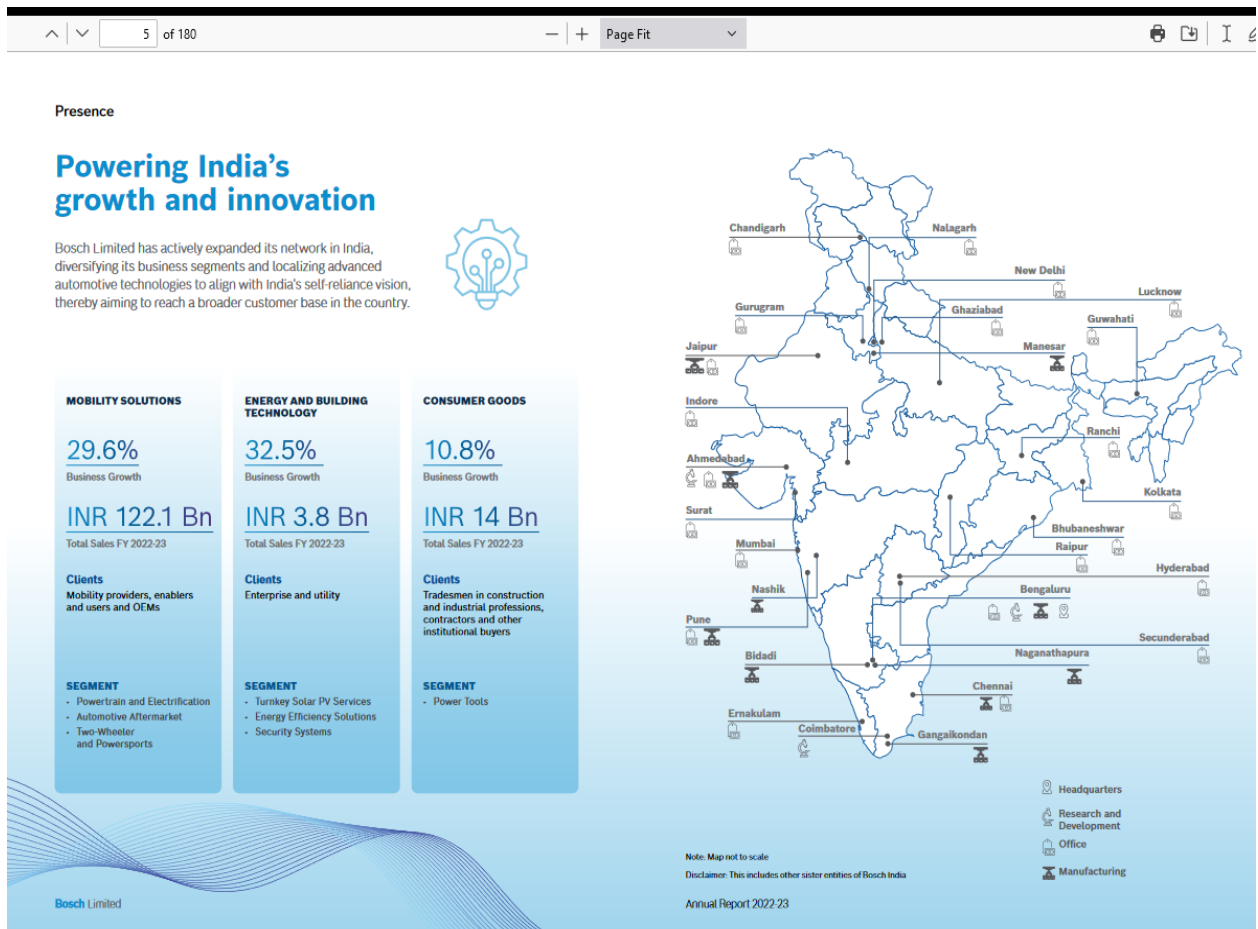
Karsten Mueller
Whole-time Director
(from 01.07.2022)



Karin Gloger
Chief Financial Officer (from 01.05.2022)
& Alternate Director to Stefan Grosse
(from 30.05.2023)



Bosch groups in India:



Ownership structure and organization:

The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-four percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The remaining shares are held by Robert Bosch GmbH and by a corporation owned by the Bosch family. The majority of voting rights are held by Robert Bosch Industrietreuhand KG, an industrial trust. The entrepreneurial ownership functions are carried out by the trust.



Shareholding

- 1 %** Robert Bosch GmbH
- 5 %** ERBO II GmbH/
Bosch family
- 94 %** Robert Bosch
Stiftung GmbH



Voting rights

- 7 %** Bosch family
- 93 %** Robert Bosch
Industrietreuhand KG

Rating:

Bosch is rated by the two international rating agencies Standard & Poor's and Fitch as follows:

Rating agency	Long-term rating	Short-term rating	Outlook	Latest update
Standard & Poor's	A	A-1	stable	September 16, 2022
Fitch	A	F1+	stable	October 13, 2022

Tax Collection Sources:

Its purpose is to apply for compensation of scrap resources we can get 1% of scrap wastage again.

Tax based amount = total value of all the assets, income, and economic activity that can be taxed

Output tax – is for vendor and it is liability

Output tax = total value of goods and service * output tax rate

Output tax is received from customer.

In a costing department, tax collection typically isn't a primary function. Tax collection is generally managed by the finance or tax department of an organization. However, the costing department plays a role in providing accurate and detailed cost information that is crucial for tax calculations and financial reporting.

The costing department contributes by:

1. Cost Allocation:

Allocating indirect costs to products or services accurately, which is essential for determining the taxable income.

2. Inventory Valuation:

Providing cost data for inventory valuation, impacting the cost of goods sold (COGS) and, consequently, taxable income.

3. Expense Allocation:

Allocating shared expenses appropriately, ensuring that tax calculations consider all relevant costs.

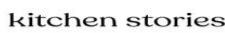
4. Costing Systems:

-Implementing and maintaining costing systems that comply with tax regulations and provide reliable cost data.

While the costing department supports the tax function indirectly, it's important for close collaboration between the costing, finance, and tax departments to ensure accurate financial reporting and compliance with tax regulations.

Our Brands:

The Bosch Group encompasses a number of different brands which are tailored to individual market requirements, and whose products and services are also designed to improve quality of life. Explore these brands below:



Key figures

Publications

Structure and organization

Business sectors

Bonds and rating

Brands



1.4 Need of study:

The need of the study is to find most effective way of planning the financial operation of the organization

- ▶ It helps to set financial goal and target.
- ▶ It aims to find out the inventory control procedure.
- ▶ It helps to avoid wastage and to control inventory of overstocking and understocking.
- ▶ It helps to promote sustainability of cost flow.

1.5 Scope of study:

It investigates the cost planning of organization and running of financial sector will be explored in the work parameters within the study.

- ▶ It studies the methos of how manpower report is made and determine the required amount of man power
- ▶ It incurred the study of defect cost during production activity

- ▶ It evaluates the inventory control and various type of methods used in organization.

1.6 Objective of the study:

To study the budget planning of an organization, how the capital sector are divided and controlled for the effective flow of the organization.

- ▶ To analyze the process of the budget plan
- ▶ To analyze the manpower reporting
- ▶ To analyze the inventory management method and watch export sales process
- ▶ To track tax collection sources.

Chapter 2

2.1 Review of literature

RIKI FIRMANSSEL (2022)

The influence of budget planning, performance measurement system and budget evaluation on the performance of directorate general of defense planning

To analyses the planning method performed measured system and budget evaluation process.

SOFIA GUSMARTINA (2021)

The influence of budget-related factors on budget absorption in pela Lawan regency OPD

To test the factor that affect budget absorption

EDUART GJOKUTAJ (2021)

The budget should not change the target

To find taxation process, public budgeting and finance, tax policy, fiscal policy.

INNA H. KANTSUR (2020)

Application of the program-target method in budget management

To process budgeting, state program, local budgeting, target method, national budget

LIRA GURIEVA (2020)

Special feature of corporate budget planning: contemporary approach

To analyses the corporate budgeting technique and approach

ODEMIR BAITA (2020)

Budget planning for education overcoming challenge

Cost planning in educational sector

And problems

STEPHEN SCHRICH (2019)

7 Step to planning a budget

Discuss various type of steps for budget planning

SIVANATHAN SIVARUBAN (2018)

Capital budgeting and cast evaluation technique: A Concept Analysis

Explores the capital sector handling and process within the parameters

TRACY FOSTER (2017)

Budget planning, Budget control, Business age and financial performance

Target population consisted of small business how plan will overcome the failure

SHUVONKOR KARMOKAR (2017)

Master budget and Master planning for a business

Consumer choice depends on particular factor like environment, location, price etc.

KENYA (2017)

Influence on budget planning on the performance of counties

To find the budgeting plan for analyses the performance

MEHMED META (2015)

Budget planning process in the municipality of Prizen

Business, Local government, revenue, modernization

RAY VANCE (2015)

The planning and control budget

Explore the planning and control process of an organization

DR. G. SRINIVASARV (2014)

A budget planning model for the health care hospital

A budget planning model for the health care hospital

SURYA RAMADHAN (2013)

A study of financial management planning for 2012

Purpose of finding out financial management process and technique for year 2012

KAY AXHAUSEN (2012)

Target driven activity planning

Concolor generate and schedule activity under the constraints of behavioral realism and algorithmic efficiency

Chapter 3

3.1 Research Methodology

Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability.

Research methodology refers to the systematic process followed to conduct research. It involves the principles, techniques, and procedures used to collect and analyze data in order to answer research questions or test hypotheses. Here's a brief overview of the key components of a typical research methodology:

1. Research Design:

- Descriptive, exploratory, or experimental design based on the nature of the research.

2. Sampling:

- Selection of a representative subset of the population for study.

3. Data Collection:

- Methods such as surveys, interviews, experiments, or observations to gather relevant data.

4. Variables and Measurements:

- Identification of variables under study and the methods used to measure them.

5. Data Analysis:

- Application of statistical or qualitative techniques to interpret the collected data.

6. Ethical Considerations:

- Adherence to ethical standards, ensuring participant confidentiality and informed consent.

7. Instrumentation:

- Selection or creation of tools and instruments for data collection.

8. Validity and Reliability:

- Assessment of the accuracy and consistency of research instruments and results.

9. Data Interpretation:

- Analysis of findings to draw conclusions and make inferences.

10. Limitations:

- Acknowledgment of any constraints or shortcomings in the research.

11. Conclusion and Recommendations:

- Summarization of findings and suggestions for future research or practical applications.

A well-defined research methodology enhances the credibility and validity of the study, ensuring that the research process is rigorous and reliable.

Methods used:

Previous year analysis

Quantitative analysis

Previous year analysis:

The previous year's analysis involves a comprehensive review of financial performance, operational metrics, market trends, employee performance, and customer satisfaction. Examining revenue, expenses, and key financial ratios provides insights into profitability and financial health. Operational aspects, including production efficiency and quality, are assessed, along with market trends and shifts in customer behaviour.

Quantitative analysis:

Quantitative analysis involves the systematic examination of numerical data to derive meaningful insights. Employed across various disciplines, it utilizes statistical methods to analyse patterns, relationships, and trends. This approach facilitates objective decision-making by providing precise, measurable results, making it a valuable tool in finance, science, economics, and social sciences.

3.2 Data collection:

Two common types of data collection methods are:

1. Primary Data Collection:

- Involves gathering data directly from original sources.
- Examples include surveys, interviews, observations, and experiments.

2. Secondary Data Collection:

- Involves using existing data that was collected by someone else for a different purpose.

- Examples include analyzing government reports, academic studies, or industry publications.

Combining these methods can provide a comprehensive understanding of a topic or research question.

3.3 Tools used in BOSCH

SAP:

SAP software provides multiple business functions with a single view of the truth. This helps companies better manage complex business processes by giving employees of different departments easy access to real-time insights across the enterprise.

Windows time tracker:

Time Tracking and Employee Monitoring software for companies and remote teams. Webwork Time Tracker has the features you need most: Time Tracking, Screenshots, Apps & Web Usage, Attendance Monitoring, Tasks, and more

Data collection used:

This study is mainly based on Secondary data which have been collected from the ANNUAL REPORTS of the company.

Chapter 4

4.1 INVENTORY DATA:

It maintains no. of inventory stock in the log unit and it helps to set the target for the no. of unit to be produced in the future target.

It helps in keep track units' production department require and log requires.

GIT-Goods In Transit, it has the information of good which are in transit

- RAW MATERIAL- total no. of raw material is recorded

It helps to keep track of out can be produced

- Inventory wastage must be avoided incase to increase COP -the cost of product
- NON-FG goods – non fixed goods counts are contained in this data
- WIP – Work In Progress count contained in this report
- Machine parts- machine parts have been purchased for the better process of production,

Month	Physical	GIT	Total Raw materials	WIP	Packing	Machine parts	Total non-FG
TBP 23	26,42,46,453	9,83,70,912	36,26,17,365	93,08,758	25,39,488	74,45,223	38,19,10,835

4.2 Defect cost:

- Defect cost - The defect cost is defined as the value of resource consumption for rework as a consequence of a defect
- if error is found in the requirement specifications during requirements gathering

- subtracting the marginal part cost CMP from the total cost to fix it. DEFECT COST
 - The additional cost due to defect parts is usually seen only as one cost driver, however, it can be broken down towards the cost created by each defect type, based on the likelihood of the occurrence of those defects. By reducing those defect-related costs, a more robust design is achieved.
- **Marginal Part Cost** The marginal part cost CMP is simply the sum of the material cost and the process cost. It is the cost required to produce one additional quantity of the design.

$$\text{CMP} = \text{CM} + \text{CP}$$

$$\text{Material Cost} = \text{Process Cost} + \text{Cycle Time}$$

**Note: Internal Defect cost % on PPC in Plan 2023 is 0.09%.
Total Defects cost % on MAT in Plan 2023 is 0.3%.**

Production (nos.)	Process Defects (Internal defects)	VA in Process defects (Internal rework)	Total process defects cost (Internal defect cost)	Total Defects	PPC output	Material consumption	Monthly Internal Defect % on PPC (w/o VA)	Monthly Internal Defect % on PPC (w/ VA)	Total Defect % on Material consumption	% on Material risk	of cost variance
Pos.	INR in 000's	INR in 000's	INR in 000's	INR in 000's	INR in 000's	INR in 000's	%		%	%	
3,64,363	2,3736		2,379	13,455	25,03,818	19,93,235	0.09%	0.1%	0.7%	-0.32%	

Defect cost:

Defect cost is a total number of defects occurs during production process. There are two type of defect cost TDC Total Defect Cost and IDC Internal Defect Cost

Defect costs in a production context refer to the expenses incurred as a result of defects or errors in products or processes. These costs can be categorized into:

1. Internal Failure Costs:

- Scrap and Rework: The cost of correcting defects in products during the production process.
- Downtime: Losses incurred due to machinery or process stoppages caused by defects.

2. External Failure Costs:

- Warranty Claims: Expenses related to addressing defects discovered after products have been sold and are under warranty.
- Customer Returns: Costs associated with handling returned products, including inspection, replacement, or repair.

3. Appraisal Costs:

- Inspection and Testing: Expenses related to assessing and ensuring the quality of products during and after production.
- Quality Audits: Costs associated with periodic audits to identify and rectify defects in processes.

4. Prevention Costs:

- Training: Investment in training programs to enhance the skills of employees and reduce errors.
- Quality Improvement Initiatives: Costs related to implementing quality management systems and process improvements to prevent defects.

Reducing defect costs is crucial for improving overall product quality, customer satisfaction, and operational efficiency. Implementing robust quality control measures and continuous improvement processes can help minimize defect-related expenses.

Defect costs in a production or manufacturing context encompass the expenses associated with identifying, addressing, and rectifying defects or imperfections in products. These costs are not limited to the financial aspects but also extend to the impact on reputation, customer satisfaction, and overall operational efficiency. In this discussion, we'll delve into the various dimensions of defect costs.

1. Prevention Costs:

- Quality Planning: Costs associated with planning and implementing quality assurance processes before production begins. This includes designing products with quality in mind and establishing quality standards and procedures.
- Training: Expenses related to training employees on quality control measures, production processes, and the importance of defect prevention.
- Quality Control Systems: Investments in systems and technologies to monitor and control the production process, reducing the likelihood of defects.

2. Appraisal Costs:

- Inspection and Testing: Costs incurred for inspecting and testing products during and after the production process to identify defects.
- Quality Audits: Regular assessments and audits to ensure that quality standards are being met. This includes both internal and external audits.

3. Internal Failure Costs:

- Scrap and Rework: Costs associated with defective products that are identified and corrected before reaching the customer. This includes the disposal of defective items and the cost of reworking or repairing them.

- Downtime: Production disruptions caused by defects can lead to downtime, resulting in lost productivity and revenue.

- Machine Maintenance: Defects may contribute to increased wear and tear on machinery, necessitating more frequent maintenance and repairs.

4. External Failure Costs:

- Customer Returns: Costs related to returned products due to defects. This includes the logistics of handling returns, assessing the extent of defects, and providing replacements or refunds.

- Warranty Claims: Expenses associated with honouring product warranties and addressing issues reported by customers. This may involve repairing or replacing defective products.

- Customer Support: Resources allocated to addressing customer complaints, inquiries, and concerns arising from product defects.

5. Lost Sales and Reputation Costs:

- Lost Revenue: Defective products can result in lost sales and revenue, especially if customers opt for competitors' products due to quality concerns.

- Brand Image and Reputation: The impact on the company's brand and reputation is immeasurable. News of defects can spread quickly through social media and online reviews, affecting consumer trust and long-term brand perception.

6. Regulatory Compliance Costs:

- Fines and Penalties: Non-compliance with industry regulations or quality standards may result in fines and penalties. These costs can be substantial and are often a consequence of failing to meet product quality requirements.

7. Continuous Improvement Costs:

- Investments in Process Improvement: Ongoing efforts to enhance production processes and reduce the likelihood of defects. This may involve adopting new technologies, updating equipment, or implementing better quality control measures.

In summary, defect costs extend beyond the immediate expenses associated with identifying and fixing defective products. They encompass a spectrum of costs incurred throughout the entire product lifecycle, from planning and production to customer support and reputation management. Proactive measures, such as investing in quality control systems and employee training, can help minimize defect costs, ultimately contributing to improved product quality and customer satisfaction.

4.3 Manpower reporting:

Manpower Planning is a two-phased process because manpower planning not only analyses the current human resources but also makes manpower forecasts and thereby draw employment programmes.

Direct and indirect manpower

The costs associated with manpower planning in a production company can include:

1. Recruitment Costs: Expenses related to advertising job openings, conducting interviews, and hiring new employees.

2. Training and Development Costs: Investment in programs to enhance employee skills and capabilities.

3. Compensation and Benefits: Salary and benefits for new hires, as well as any adjustments for existing staff due to role changes or skill enhancements.

4. Technology Costs: Expenses related to implementing new technologies or software for workforce management and planning.

5. Consultancy Fees: If external consultants are involved in the planning process, their fees contribute to the overall cost.

6. Time and Administrative Costs: The time and resources spent by HR and management in planning, analysing, and implementing the manpower strategy.

7. Temporary Staffing Costs: If temporary or contract workers are used to fill immediate gaps, their costs contribute to the overall expenditure.

8. Employee Turnover Costs: Costs associated with replacing employees, including recruitment, onboarding, and potential productivity losses during the transition.

While there are costs involved in manpower planning, effective planning can lead to improved efficiency, reduced turnover, and better alignment of the workforce with organizational goals, ultimately contributing to cost savings in the long run

Plant Total	Plan 2024'
Indirect PC of Plant	39
PM	1
CTG	2
PUR	6
HRL	2
TEF	7
LOG	6
MFG	10
QMM	5
Indirect PC of SG&A total	15
ENG	12
PURx	3
PJM	
Indirect	54

, a manpower report in a production company is a comprehensive document that encompasses staffing levels, skill sets, productivity metrics, workforce planning, turnover rates, challenges, diversity and inclusion efforts, and training programs. It serves as a valuable tool for human resource management, aiding in strategic decision-making and ensuring that the workforce aligns with the production company's objectives. Regular updates to the manpower report allow for agility in responding to dynamic industry conditions and maintaining a skilled and motivated workforce.

Manpower cost incurred:

Manpower costing, also known as labour costing or human resource costing, is the process of quantifying and analysing the expenses associated with the workforce in a company. It involves calculating the total cost of employing personnel, including salaries, benefits, training, and other related expenses. Here's a breakdown of key elements in manpower costing:

1. Direct Labor Costs:

- Wages and Salaries: This includes the basic compensation paid to employees for their services.
- Overtime Pay: Additional compensation for hours worked beyond regular working hours.
- Bonuses and Incentives: Variable payments linked to performance or achieving specific goals.

2. Indirect Labor Costs:

- Benefits and Allowances: Costs associated with employee benefits such as health insurance, retirement plans, and other allowances.
- Taxes: Employer-paid taxes, including social security contributions and other statutory taxes.
- Leave and Absenteeism: Costs related to employee leaves, including paid time off and the expenses of covering absent employees.

3. Training and Development Costs:

- Employee Training: Expenses for training programs, workshops, and courses to enhance employee skills and knowledge.

4. Recruitment and Onboarding Costs:

- Recruitment Expenses: Costs associated with the hiring process, including advertising, recruitment agencies, and interview expenses.

- Onboarding Costs: Expenses related to orienting and integrating new employees into the organization.

5. Workplace Amenities and Facilities:

- Office Space and Utilities: Costs related to providing workspace, utilities, and amenities for employees.

- Safety and Health Measures: Expenses for maintaining a safe working environment, including safety equipment and protocols.

6. Productivity and Performance Costs:

- Incentives for Productivity: Additional compensation tied to increased productivity or achieving performance targets.

- Performance Appraisals: Costs associated with performance evaluation systems and related administrative tasks.

7. Employee Turnover Costs:

- Separation Costs: Expenses incurred when an employee leaves, including exit interviews, severance pay, and administrative costs.

- Replacement Costs: Costs associated with recruiting, hiring, and training a new employee to fill the vacancy.

8. Compliance and Legal Costs:

- Labor Law Compliance: Expenses related to ensuring compliance with labour laws and regulations.

- Legal Fees: Costs associated with handling employment-related legal matters.

Effectively managing manpower costs is crucial for a company's financial health and competitiveness. It requires a balance between providing fair compensation to employees and optimizing operational efficiency. Regular analysis of manpower costs helps organizations make informed decisions about resource allocation, workforce planning, and overall budgeting strategies. It also provides insights into the cost-effectiveness of different human resource management initiatives and allows companies to adapt to changing economic conditions.

4.4 Quantitative analysis:

Sales target calculation:

1. Growth rate:

Growth rate = current year sales – last year sales

last year sales

2. Projected sales:

Projected sales = Last year sales * (1+ growth rate)

► Calculation:

growth rate:

$$\begin{aligned}\text{growth rate} &= 141832 - 111047 / 111,047 \\ &= 0.27\end{aligned}$$

$$\begin{aligned}\text{projected sales} &= 111,047 * (1+ 0.27) \\ &= 141029\end{aligned}$$

Since the projected sales is 141029 and current year sales is more 141832, we can fix the target above the projected sales and current year sales.

Therefore, the organization might consider setting a sales target slightly above this projected value, taking into account market trends, new product launches, or other relevant factors.

Chapter 5

5.1 Finding:

- ▶ We can control the defect cost in organization. By understanding the root cause of the defect, training the employee, quality standards
- ▶ Inventory data help to maintain the cost by avoiding the excess purchase of required material.
- ▶ Effectively managing and minimizing defect costs is crucial for improving product quality, customer satisfaction, and overall operational efficiency in a production company.
- ▶ By maintaining the budget cost, we can maintain the target of the year

It also helps in increase in next year target fixing high.

We found that all these inventory data's, defect cost and manpower reporting play major role in costing products

Every inventory data help to watch the flow of material in organization and helps to avoid unwanted purchase

5.2 Suggestions:

- ▶ By using quantitative analysis, the next year sales target can be fixed. The previous year sales have been maintained with proper flow of operation. Which increases the next year target.
- ▶ Defect cost can be controlled by setting quality standards, training and skills development for employees, quality control process. According to data given internal defect cost must be given importance to control the defect cost expenses.
- ▶ Inventory data should be maintained to check the material flow in production unit and to avoid the excess purchase of required

5.3 LIMITATION OF STUDY:

Limitation of study means the amount of limitation that project contains is called limitation

The limitations of a study typically include factors like sample size, methodology constraints, potential bias, generalizability issues, and external validity concerns. It's crucial to acknowledge these limitations to provide a realistic perspective on the study's findings.

REFERENCE:

1.Books:

"Zero-Based Budgeting: A Practical Guide" by James A. DiLellio

"Budgeting: A Comprehensive Guide" by Steven Bragg

"Beyond Budgeting: How Managers Can Break Free from the Annual Performance Trap" by Jeremy Hope and Robin Frase

"Flexible Budgets Overhead Cost Variances Analysis" by John M. Shank and Vijay Govindarajan

2.Journals/Articles:

"Target-based budgeting and its impact on management control systems" by M. Doupnik and B. Rich, published in the Journal of Accounting and Economics.

"Activity-Based Budgeting: Making It Work for Small and Mid-Sized Companies" by Douglas T. Hicks

3. Websites:

- Investopedia has articles on budgeting and financial planning that may provide insights.

CONCLUSION

In conclusion, the target budget planning report highlights the strategic financial goals and projections for the upcoming period. Through a comprehensive analysis of expenses, revenues, and key performance indicators, the report aims to guide effective resource allocation. It underscores the importance of aligning budgetary targets with organizational objectives, emphasizing cost-effectiveness and revenue growth. Implementation of the proposed budget is anticipated to contribute to financial stability and support the company's overall mission. Regular monitoring and adjustments will be crucial to ensure adaptability to dynamic business environment

My internship experience has been both enriching and educational. Throughout my time at Bosch power tools, I had the opportunity to immerse myself in real world projects, collaborate with immense professionals, and gain insights in to the industry. The hands-on experience I acquired significantly expanded my skill set and understanding of the field. I am grateful for the guidance and mentorship provided by the team, which allowed me to overcome challenges and achieve valuable outcomes.