



DAVANGERE UNIVERSITY

**AN ORGANISATIONAL STUDY ON
BOSCH GLOBAL LIMITED**

2023-2024

*Submitted in partial fulfillment of requirement for the award
of degree of*

BACHELOR OF COMMERCE

Submitted By:

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COLLEGE CERTIFICATE

This is to certify that Mr. Stephen S a student of college bearing Reg. No. U13SJ21C0103 has undertaken "COMPANY ANALYSIS ON BOSCH GLOBAL LIMITED" in partial fulfillment of requirement for the award of degree of BACHELOR OF COMMERCE for the academic year 2023-2024.

SIGNATURE OF HOD

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**SJM COLLEGE OF ARTS , SCIENCE AND COMMERCE
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DECLARATION

I do hereby declare that this project report entitled "AN ORGANISATIONAL STUDY ON BOSCH GLOBAL LIMITED" have completed under the guidance of Mr. Mohan kumar M. Department of Commerce, SJM COLLEGE OF ARTS, SCIENCE AND COMMERCE , Chitradurga in partial fulfillment of requirement for the award of degree of BACHELOR OF COMMERECE from Davangere University for the academic year 2023-24

Mr.Stephen S

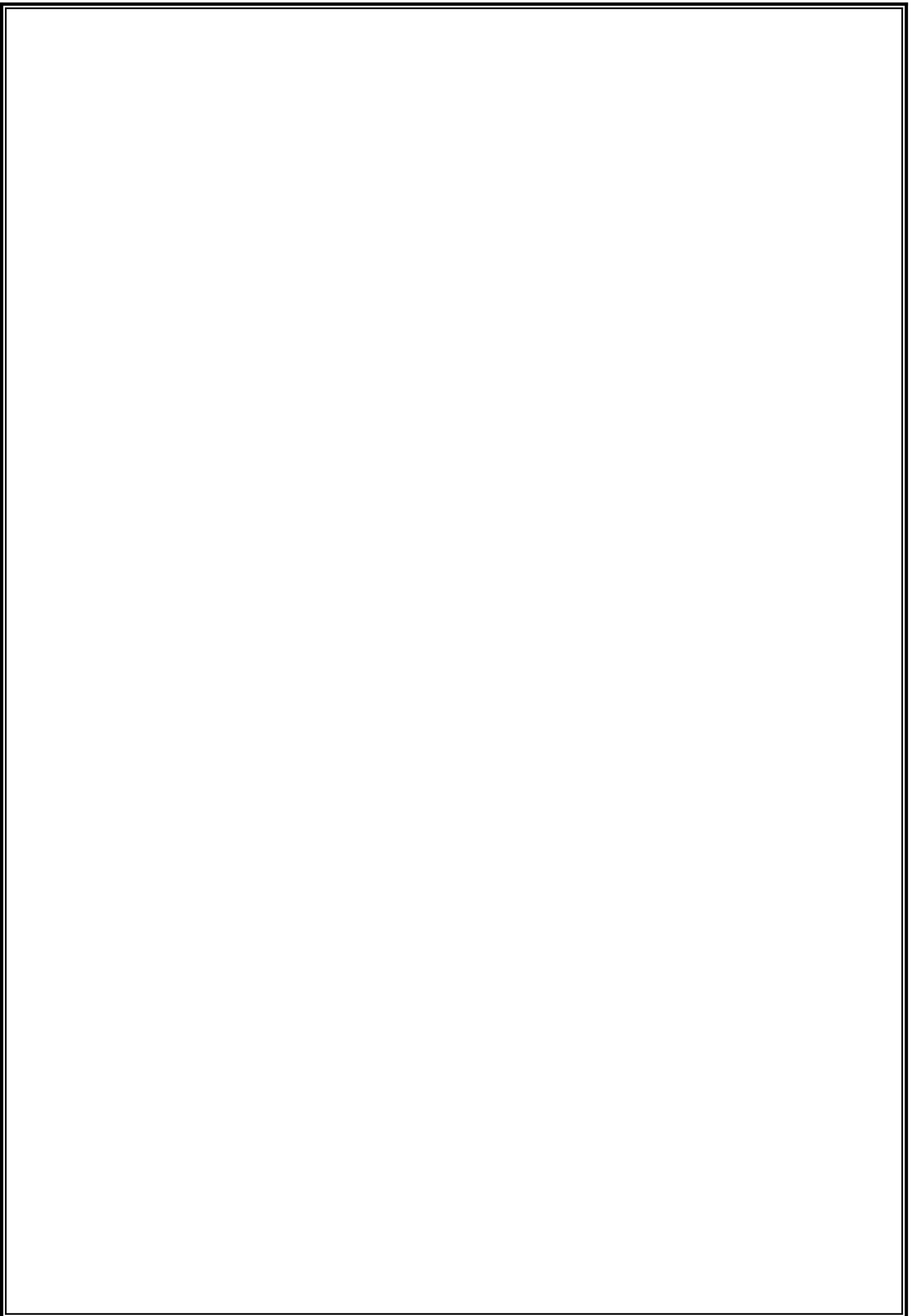
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INTRODUCTION

Introduction:

As of December 31, 2022, The Bosch Group, a global supplier of technology and services, employs around 421,000 associates worldwide. In 2022, the company achieved sales of 88.2 billion euros and is divided into four business sectors like Industrial Technology, Automobile and Industrial Technology, Consumer Products, and Energy and Building Technology. Smart homes, Industry 4.0, and connected mobility are among the innovative solutions offered by Bosch, which is a leading IOT provider. Bosch is pursuing a vision of mobility that is sustainable, secure, and exhilarating. Through its expertise in sensor technology, software, and services, as well as its own IoT cloud, it provides its customers with connected solutions across different domains from a Single Source. The strategic goal of the Bosch Group is to enable linked living through the use of goods and services that are either AI-powered or were created or produced with its assistance. Bosch provides new and exciting products and services that enhance people's lives all around the world. Put simply, Bosch develops "Invented for life" technologies.

Our driving force is the ambition to create goods that are "Invented for life," excite people, enhance their quality of life, and contribute to the preservation of natural resources. This is reflected in our mission statement, "We are Bosch." It encapsulates our strategic perspective, our strengths, and our values.



Our corporate culture is shaped by seven core principles, which span from a focus on earnings and the future to embracing cultural diversity. These values form the foundation of our mission. Our actions, as well as our set of values, are characterized by responsibility and sustainability.

To us, sustainability entails safeguarding the business's long-term prosperity while also preserving the natural resources that both the current and next generations depend on. Thus, ecology is a catalyst for innovation. In addition, we exhibit a very high standard of corporate social responsibility both inside and beyond the organization.

Being a privately held business, we operate apart from the stock markets. Our profits are used sustainably and long-term for the good of society, the environment, and future generations through the Robert Bosch Stiftung, a charitable organization. Operates in India through the following 15 companies: Robert Bosch Automotive Steering Private Limited, Auto mobility Services and Solutions Private Limited, Precision Seals Manufacturing Limited, Robert Bosch India Manufacturing and Technology Private Limited, MICO Trading Private Limited, and Mivin Engineering Technologies. Bosch Limited is the flagship company of the Bosch Group in India. Other companies include Bosch Chassis Systems India Private Limited, Bosch Rexroth Private Limited, Bosch Global Software Technologies, Bosch Automotive Electronics India Private Limited, and Bosch Electrical Drives India Private Limited. Since its founding in 1951, Bosch India has established seven development and application centers in addition to growing its manufacturing operations to span 17 sites. The Bosch Group in India, which employs an astonishing 38,700 associates, reported consolidated sales of about INR 30,368 crores in the fiscal year 2022–2023. Notably, during the same fiscal year, revenue above INR 14,929 crores was earned alone by the flagship company, Bosch Limited.

1.1 Significance of the Study:

The study of organizational behavior looks into how individuals, groups, and organizational structure affect behavior inside the organization. The study of human dynamics within an organization is known as organizational behavior. It aids in the understanding of the interactions between company executives and

human resources personnel. It also shows a lot about how coworkers at the same level communicate with one another. The study of organizational behavior focuses on how employees in various types of organizations might be inspired to collaborate more successfully. Organizations may better understand their business ethics and discover strategies to positively influence employees' attitudes and behaviors to create more positive experiences for them individually as well as for the company by analyzing these behaviors.

Objective of the Study:

The purpose of the organization study on Bosch Organization was to accomplish the following specific goals

- Gain familiarity with the organization's composition and operations.
- To become acquainted with the many organizational departments, their roles, and all of their associated paperwork.
- To comprehend how an organization's main business processes are run.
- To comprehend the various levels at which information including data flow diagrams is used in organizations to inform decisions.
- To comprehend the degree to which ICT is being adopted by the organization for a variety of purposes.
- To comprehend the organization's portfolio structure and growth and diversification strategies.
- To research the organization's overall performance.
- To comprehend employee performance evaluations, as well as different employee welfare initiatives and training programmes.
- To comprehend the actions made to raise the organization's productivity
- To conduct a SWOT analysis of the organization.

1.3 Methodology of the Study:

A study's success is primarily determined by the methodology employed. The validity of the results will be increased by using the proper methodology. For the study, the following approaches were used.

- **Identification of the company:**

The Bosch Company was chosen for the organization study after taking into account a number of variables, including as the company's reputation, ease of obtaining permits, industry, location, etc.

- **Identification of the Objectives:**

The organization study's precise goals were determined and prioritized in a list. This made it easier to carry out the organization study in an organized and efficient way.

- **Data collection:**

Both primary sources and secondary sources were used in this particular research.

- **Primary Data:**

Primary data were gathered by direct observation, in-person interviews, and conversations with managers and staff members of the organization's various departments.

- **Secondary Data:**

Through a review of the literature, which includes the company's internal records, publications, annual reports, journals, statutory reports, official and other websites, etc., secondary data were gathered.

- **Analysis and Interpretation:**

In order to assess and improve the quality of the data, the obtained data needs to be carefully analyzed. In order to aid in accurate interpretation, the analysis is carried out to determine the true meaning of the data. Finding patterns and trends in data sets is the goal of data analysis, and describing those patterns and trends is the goal of data interpretation.

- **Documentation:**

Following the data's analysis and interpretation, the information is recorded in an organization study report that provides a detailed report on the organization study.

1.4 Limitations of the Study:

There were some limitations in conducting the organization study at Bosch Global private limited.

- Due to their hectic work schedules, executives and managers made it difficult to obtain data.
 - Lack of time prevented an in-depth analysis of the company from being completed.
 - The information provided by executives and the company's reports heavily influenced the study's data's dependability.
 - Due to the company's restrictions on disclosure of financial information, a thorough examination of the business's financial performance is not feasible.
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CHAPTER-1

INDUSTRY PROFILE AND COMPANY PROFILE

Introduction:

The goals of Bosch goods and services are to uplift people's spirits, enhance their quality of life, and contribute to resource conservation. Our goals are excellence and dependability. Put succinctly, our goal is to develop technology that is "Invented for life." Our driving force is the ambition to create goods that are "Invented for life," excite people, enhance their quality of life, and contribute to the preservation of natural resources. This is reflected in our mission statement, "We are Bosch." It encapsulates our strategic perspective, our strengths, and our values. Our corporate culture is shaped by seven core principles, which are the foundation of our mission. These values range from a focus on earnings and the future to embracing cultural diversity. Our actions, as well as our set of values, are characterized by responsibility and sustainability.



To us, sustainability entails safeguarding the business's long-term prosperity while also preserving the natural resources that both the current and next generations depend on. Thus, ecology is a catalyst for innovation. We also exhibit a very high degree of corporate social responsibility both inside and outside the organization.

Being a privately held business, we operate apart from the stock markets. Our profits are used sustainably and long-term for the good of society, the environment, and future generations through the Robert Bosch Stiftung, a charitable organization. Robert Bosch established the Stuttgart-based "Workshop for Precision Mechanics and Electrical Engineering" in 1886. This marked the beginning of the company that operates globally today. It was marked from the beginning by social commitment and innovative strength. Our goal as a top technology business is to use "Invented for life" technology to influence the world of tomorrow. The study just for the sake of study? We don't operate like that. We think that a concrete innovation should always be the end product of study. Something that improves the lives of others. Because of this, people's daily lives tend to include our inventions at a variety of points.

COMPANY PROFILE

Inception of the company:

India's Bosch has cause for celebration: A century ago, the Company started its operations on the subcontinent. The precise date is well known: Bosch and Illies & Co. signed a contract on September 1, 1922. This deal called for the long-standing Hamburg-based trading company to sell Bosch products in India. The company had a comprehensive understanding of the local market conditions. From then, the route led to Bosch's current regional companies in India through licensed production in the 1950s.

For Bosch, the Indian subcontinent presented enormous business potential a century ago, which is why the company chose to launch its operations there. In India, Bosch aimed to standardize its worldwide popular magneto ignition technology, which was necessary for automobiles. In order to assess whether it would be beneficial to establish a subsidiary or perhaps its own production facility, Bosch also sought to monitor changes in the market.

Following World War I, there was a second phase of internationalization, which included the shift to India. Being present in every Asia Pacific nation with potential

for economic growth was crucial for Bosch. The strong reputation that Bosch's components had gained throughout the world indicated that even in nations where vehicle use was still relatively new, there might be promising market opportunities. Rather than letting others take use of the Indian market, the corporation desired to take advantage of these chances itself.

Therefore, at first, parts for magneto ignition systems, electric horns, headlights, alternators, and spark plugs were carried from Stuttgart to the subcontinent via the North Sea ports, the Neckar and Rhine rivers, and the Cape of Good Hope. At first, commerce was challenging due to fierce competition from Britain, a colonial power. Sales increased to just 150,000 Reichsmarks by the late 1930s, or less than 0.1 percent of the company's overall sales, despite the positive image of the Bosch brand and the high degree of customer satisfaction.

The primary cause of the poor sales was the high concentration of American and British vehicles on Indian roads, which were outfitted with components and technology from their home nations as well as manufacturers like Lucas, Delco-Remy, and Auto-Lite. Bosch was left with what scraps remained since the competition was well-positioned to meet the need for spare parts. The issue was made worse by the Second World War and the ensuing decline in exports to India. Bosch eventually closed all of its sales offices while the war continued. And once the war was over, the company had a lot of obstacles to overcome before achieving its current market position in India.

A collaboration with the emerging Indian business Ghaziabad Engineering Corporation and its subsidiary Motor Industries Co. Ltd. (Mico) marked the first significant advancement in 1951. Mico received authorization from Bosch to manufacture diesel injection pumps and spark plugs. At a time when India was adopting a very stringent licencing strategy with regard to foreign corporations following the end of British colonial rule, Bosch saw an opportunity to enter the Indian market thanks to the alliance. Through their collaboration with Mico, Bosch has the opportunity to gain a solid reputation as a local manufacturer in India.

The initial five-year plan for India assisted in setting the stage. It was adopted in 1950 by the democratic government led by Jawaharlal Nehru, the nation's first

prime minister, and it recommended using diesel engines to irrigate fields in a methodical manner. Consequently, the first Bosch initiative to succeed in post-colonial India was the development of diesel injection technology for stationary engines. Experts from Bosch ruled out an early lifting of the economic limitations in a 1953 market analysis. But they continued, by producing in India, Bosch could eliminate import risks going forward, paving the way for steady and predictable corporate growth. "We must choose a different course," Because diesel-fueled trucks are becoming more and more motorized, Bosch's partner's automotive business operations Mico quickly surpassed its diesel technology sales for agricultural stationary engines. Bosch first purchased a solid 9% of Mico in 1954, and over time, it increased its share of the company. Currently, Bosch owns over 70% of the company.

Bosch Limited has been the name of the company since 2008. It has branches in Bengaluru, Nasik, Naganathapura, Sitapura, and Goa. Its items are now also branded with Bosch. But Bosch's operations in India have long since expanded well beyond just production and sales. The field of engineering has gained particular significance. For instance, regional experts in India create durable engine control systems that are inexpensive and simple to manufacture for low-cost automobiles. In 2014, Bosch established a Research & Technology Center (R&T) in Bengaluru to coordinate the company's research and development efforts in the region. This was followed in 2017 by the establishment of a branch of Bosch's Centre for Artificial Intelligence in Bangalore (BCAI). In 2019, Bosch inaugurated its Centre for Data Science & Artificial Intelligence at Indian Institute of Technology, Madras (IIT Madras), one of the country's top engineering institutes. One of the things that makes Bosch in India stand out today is the evolution of its local IT activities. Bosch India's software Centre, which was established in 1998, has seen tremendous growth since then. It was re-christened in 2008 as Robert Bosch engineering and business solutions (RBEI). Today, RBEI provides engineering services as well as IT solutions worldwide. In addition to India, Bosch has associates working for it in six additional countries across Asia, the Americas and Europe.

Nature of the Business:

Bosch operates in four business segments: mobility, industrial technology, consumer goods, and energy and building technology. As one of the world's leading providers of Internet of Things (IoT) solutions, Bosch provides cutting-edge solutions for smart home, industry 4.0 and connected mobility.

Mobility India has become the third largest car manufacturer in the world. In the automobile industry as a whole, automobile production (excluding motorcycles) in 2022-23 increased by 22% compared to 2021-22. Passenger car production increased 25% year-on-year, with strong demand in the sport utility vehicle (SUV) sector, mainly supported by the easing of semiconductor shortages. Among commercial vehicles, the heavy commercial vehicle (HCV) segment grew by 35% year-on-year, supported by a favourable macroeconomic environment, replacement demand, and recovery in infrastructure, mining and construction activities, compared to pre-COVID-19 levels. We approached the peak one after another. The light commercial vehicle (LCV) segment grew 23% year-on-year, approaching its previous demand peak in 2019, and remains stable, well supported by healthy demand from agriculture and allied sectors, especially transportation needs last year. Maintained. Miles e-commerce and stable domestic macroeconomic environment. For tractors, industry sales remained healthy at 11% YoY in FY23, supported by strong rural cash flow drivers. Motorcycles remained at a low level, registering 10% year-on-year growth, despite improvements throughout the holiday season. Domestic market sales volumes remain below pre-pandemic levels, while export volumes remain under pressure due to local currency devaluation and foreign exchange availability issues. The three-wheeler segment showed a sequential recovery with an increase of 14% year-on-year. Bosch outperformed the automotive industry and grew faster than the market. This is mainly due to the increasing market share among major players and the increase in vehicle content due to revised emission standards. The market outlook for the passenger car segment in 2023-24 remains optimistic, with SUVs preferred and orders strong. However, changing preferences and increasing acquisition costs from mini/micro/mid-range segments to compact/supercompact/UV models are deterring entry-level buyers. The HCV segment is expected to perform moderately due to the shift towards higher tonnage and higher on-road efficiency. The LCV

segment is supported by increasing demand for last-mile delivery and e-commerce. Meanwhile, for the tractor industry, sales volumes are expected to normalize from a higher base, supported by a favourable monsoon and rural cash flows. Bosch envisions that by 2030, around one in three new cars worldwide will be an electric vehicle (EV). Bosch is already adapting to this change, offering solutions from passenger cars (PCs) to commercial vehicles (CVs), from hybrids to battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs). Bosch Corporation offers complete system solutions for hydrogen-based powertrains in India. We provide systems and components for hydrogen engines and FCEV technology. Bosch also offers hydrogen tank systems in partnership. The company is preparing to become a system solution provider for new technologies in the mobility field. The company has set up a state-of-the-art hydrogen engine testing infrastructure at its Aduadi campus in Bangalore. Through this, we hope to further develop and advance our hydrogen engine and fuel cell technology capabilities and drive the alternative fuel revolution in India. Our Powertrain Solutions division works extensively with major energy sector players and original equipment manufacturers (OEMs) on our hydrogen engine business, and we are pleased to announce that we have also secured our first hydrogen business project. Our two-wheeler business also recorded an overall business growth rate of 14.8% in FY 2022-23 compared to the previous financial year the increase in sales was primarily due to increased cost recovery of new projects from existing customers and customer projects in the component supply area. As the semiconductor supply crisis stabilizes, we do not see any major threats to component supply. Given our decision to stick with two-wheel internal combustion engines (ICE), we expect component business to increase across all his OEMs. Bosch's success in electrification has enabled it to win significant business through its sister companies by offering locally-specific powertrain solutions, further strengthening its presence in the growing electric two-wheeler market, which led to further growth in the motorcycle business. In India. Our automotive aftermarket business also achieved record revenues and strong operating margins in fiscal year 2022-23. This remains the benchmark for working capital management. We have the fourth largest automotive service network of 500 locations and have experienced strong export growth with untapped markets and expanded product range in Sri Lanka, Bangladesh and Nepal. This was achieved with the help of Genz and

demand generation and enhanced customer experience strategies. The Beyond Mobility Solutions division recorded his 14.1% sales increase. Bosch Power Tools India aims to drive India's strong growth story by supporting the Indian government's infrastructure drive and building a world-class manufacturing structure the company continues to exist.

Goals and Objectives of the Company:

Goals:

Our goals include lowering the cost of renewable energy, improving the safety, economy, and cleanliness of transportation, and creating more environmentally friendly products in general. Apart from trying to lessen all forms of adversity, I want to encourage people's intellectual, physical, and moral growth.

Objective:

Bosch is dedicated to acting in a way that advances environmental sustainability, the interests of society, and the prudent use of finite resources. The company's mission is to enhance people's lives by providing them with cutting-edge, useful goods and services.

Mission and Vision and Values of the Company:

Mission:

The company's mission is to enhance people's lives by providing them with cutting-edge, useful goods and services. Bosch upholds the principle of responsibility towards various stakeholders such as the environment, society, customers, associates, youth, and corporate governance.

Vision:

We are motivated by the desire to develop products that are “Invented for life,” that spark enthusiasm, that improve quality of life, and that help conserve natural resources. Our “We are Bosch” mission statement reflects this. Our values reflect how we run our business: our professional ethics in dealing with our business partners, investors, employees, and society.

Values:

Future orientation and results. Our actions are result-oriented. This allows us to secure our future. This also provides a solid basis for corporate and foundation social initiatives. Responsibility and sustainability We act prudently and responsibly for the benefit of society and the environment Initiative and determination We act on our own initiative, assuming business responsibility and pursue our goals with determination Openness and trust We communicate important issues made timely and openly . This is the best basis for a relationship based on trust. Fairness We treat our colleagues and business partners fairly and consider fairness to be the foundation of our company's success. Reliability, reputation, legality we only promise what we can deliver, accept binding agreements and respect and comply with the law in all our business dealings. Diversity We value and encourage diversity for the enrichment it brings and consider it essential to our success.

Quality Policy:

- Bosch Automotive Aftermarket (AA) offers a vast array of spare parts for passenger cars, light and heavy commercial vehicles, off-highway applications, and two- and three-wheelers, as well as cutting-edge diagnostic tools and test equipment for independent aftermarket and workshops
 - Products such as automotive batteries, auto electrical parts and components, brake parts, bulbs and lighting, diesel components and systems, electric parts, filtration parts, fuel supply, gasoline parts, horns,
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lubricants, sensors, spark plugs and wiper blades are included in the product portfolio. Products made as Bosch Original Equipment (Filters and Spark Plugs) are also included.

- One of the renowned products associated with Bosch is spark plugs. The change in design in sparking technology has resulted in better combustion quality in ICEs, thereby producing cleaner emissions.
 - Spark plugs are among the well-known goods linked to Bosch. Better combustion quality in internal combustion engines (ICEs) has been achieved through design changes in sparking technology, leading to lower emissions.
 - A vital component that helps to increase brake force is brake fluid. Put simply, when someone applies pressure to the front and rear brakes, the fluid converts the applied force into pressure, causing the car to stop. Out of the four braking fluid kinds or standards (DOT 3, DOT 4, DOT 5, and DOT 5.1), BOSCH released ENV6 in June 2022, surpassing the DOT 5.1 standard. ENV6 increases end-user safety by reducing the likelihood of brake failure and improving reaction time.
 - We make every effort to include sustainability into both our packaging and our products. For instance, by adjusting the bottle specification, we were able to decrease the amount of plastic used in lubrication bottles and, at the production level, 30 tonnes of plastic.
 - The core values of our products are dependability, quality, and safety. When it comes to the creation, production, and delivery of our goods and services, we go above and beyond simple legal compliance. Following the motto "Invented for life," we make sure that everything we offer reflects our commitment to improving lives and going above and beyond.
 - A key component of our quality policy is product safety, which we consider to be of utmost importance. Bosch Power Tools is a prominent supplier of measuring tools, power tool accessories, and power tools. We put our users' requirements first in our targeted growth categories. Our success is derived from our innate understanding of their needs. We employ Design Thinking
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as the cornerstone of user-focused innovation in order to do this.

- The GWS 600 compact 4" angle grinder is a well-liked power tool that perfectly embodies our user-focused philosophy. We make use of Design Thinking concepts to make sure that known operating dangers, including those present in disc sanders, abrasive cut-off machines, and grinders, are minimised or completely eliminated in the design of our products.
 - A safety guard that is appropriate for the particular kind of wheel that is sold with the grinder is a requirement for grinders. Guards for additional wheel types that are suggested for this grinder are also offered as extras. Our wheel guards are easy to use and safe because they can be adjusted without taking off the grinding wheel. We put our guards through a thorough testing process to make sure they pass the strict requirements of the "wheel burst impact test cycle" as stated in the IEC 60745-P2-3 standard proposal for grinders. This ensures compliance. The "Wheel Burst Test" and a comprehensive inspection are used to confirm this conformity.
 - Establishing transparency regarding adherence to social and environmental standards is essential for responsible supplier management. This makes it possible for us to give our suppliers focused assistance so they may consistently improve their sustainability performance. Bosch Limited employs contract terms, sustainability-related assessments, and the ensuing package of measures to achieve a high level of sustainability and compliance in its supplier network. Inspections conducted on-site are a crucial part of how we evaluate our suppliers.
 - We take under consideration maintainability perspectives at an early organize when selecting potential providers in agreement with our group-wide rules. These stipulate that all unused providers must be screened some time recently entering into a commerce relationship. The comparing timing and the technique utilized are decided by the particular divisions. As portion of the endorsed party list screening, a check in addition carried out earlier to the conclusion of a contract to decide whether potential commerce accomplices are included in authorize records or affected by Processors are provided with a required security watch that's reasonable for
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the particular sort of wheel sold with the processor. Moreover, watches for other wheel sorts prescribed for this processor are accessible as adornments. Our wheel watches are outlined to be flexible without the require for evacuating the pounding wheel, guaranteeing ease of utilize and security. To guarantee compliance, we thoroughly test our guards to meet the rigid necessities of the 'wheel burst affect test cycle' sketched out within the IEC 60745-P2-3 standard proposition for processors. This compliance is confirmed through a intensive review and the execution of the 'Wheel Burst Test.' ban directions. Current provider connections are moreover examined. The determination of providers for survey is both risk-based and event-driven. Since 2017, besides, an computerized IT-based compliance check is run to confirm whether trade accomplices are on outside compliance records and recognize any potential infringement of national or universal enactment or stricter measures. In the event that any question remains after the check is completed, the compliance officer starts reasonable measures alongside the acquiring work. These can extend from talks with the commerce accomplices to withdrawal from the trade relationship.

- New contracts are given out based on factors like quality, price, and previous supply reliability. Only properly graded current suppliers are granted new orders. Moreover, they should not contravene sustainability standards. Contracts are not renewed with active providers who are discovered to be involved in illegal activity or whose sustainability performance is judged to be deficient. Every criterion has the same escalation procedure.

Product and Services profile:

Mobility:

- Bosch creates cutting-edge solutions that enable fresh mobility options. Bosch integrates vehicle technology, the data cloud, and services to provide comprehensive mobility solutions, whether for private or commercial vehicles, multimodal transportation services, fleet management, or smart transport infrastructure
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- Bosch provides the aftermarket and repair shops with a vast array of spare parts, including new and exchange components, repair solutions, and equipment for the repair shop, such as hardware and diagnostic software. Bosch provides automotive expertise and information to repair shop partners and service technicians worldwide through partner programmes and service training courses. As a result, testing and repairs can be completed by repair shops faster, safer, and more effectively.
- As a sponsor, partner, and supplier, we set the standard. Since 1901, Bosch has been a major contributor to several historic racing victories. with an unparalleled level of dedication and experience. Presently, a large number of teams and manufacturers worldwide depend on our components and our in-depth understanding of full-system development. Having the right perspective is crucial when racing. The perspective of the circuit through the driver's helmet. The engineers' and mechanics' eyes were fixed on the screens. and the onlookers' eager eyes on the finish line. There's Bosch in every way. Our parts and systems make sure that every race is exciting, passionate, and inventive.
- Pedal-assist e-bike drive systems We create, manufacture, and sell goods that captivate consumers. Mobility that is more connected, personalised, and sustainable than ever is made possible by our systems. Bosch eBike Systems is synonymous with excellence and dependability, a collaborative relationship with clients, distributors, and producers, and top-notch customer support.

At Home:

- Bosch provides customized home solutions to help you live a little bit easier every day.
 - Bosch offers a wide range of home appliances.
 - Bosch offers a large selection of power tools.
 - Bosch offers a large selection of tools, including cleaning, heating, and cooling appliances, smart home features, and measuring and cooling instruments.
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- **Industry And Trades:**
 - For the trades and industry, Bosch provides cutting-edge goods and services.
 - One of the top global providers of business process outsourcing solutions is Bosch Service Solutions. We offer complicated, technologically driven service solutions in over thirty languages. Together with our clients, we also create and run cutting-edge business concepts. In order to provide comprehensive service solutions from a single source, we are continuously enhancing our IT and consulting experience.
 - Bosch is a partner that operates on a global scale and offers a unique portfolio of cutting-edge technology and unmatched industry expertise for mobile applications, factory automation, and process plant engineering. All throughout the world, our skilled colleagues are always coming up with innovative, adaptable, and resource-saving solutions. Our multipurpose solutions are intended for use in linked production environments and are beneficial to both machinery producers and end users.
 - As your dependable partner, we offer integrated, networked solutions that improve the comfort, efficiency, and security of your facilities. As consultants, installers, and service providers, our professionals assist you. Benefit from our in-depth knowledge and integrated solutions built on cutting-edge technologies, all from a single, nearby source.
 - Astute and productive Bosch provides you with customised steam, process heat, and decentralised energy management solutions. For commercial and industrial applications, Bosch offers precisely engineered and incredibly effective system solutions, whether it's for waste heat recovery systems, air conditioning units, CHP plants, or industrial boilers.
 - Bosch creates cutting-edge, premium power tools that are sure to deliver expert outcomes in all artisanal domains. Our tools meet the highest standards, are dependable, strong, and powerful, and they facilitate your work. Our Bosch cordless tools are particularly good because of their
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extended lifespan, excellent performance, and lengthy runtime.

- Our goal is to safeguard people, property, and buildings. In addition to access control and management systems, our product offering also includes voice evacuation, video surveillance, intrusion detection, and fire warning systems. The range is completed with professional conference and audio equipment for voice, sound, and music communication.
- There is no doubt about what businesses anticipate from Industry 4.0: increased traceability, transparency, and process optimisations to cut costs and boost productivity. For machine builders and operators of various plants, Bosch Connected Industry provides complete services and software that is specifically designed for them. Learn more about the services and business models offered by Bosch IoT software solutions, as well as how they may help you digitise and automate your manufacturing.
- The variations in production Bosch Production Solutions provides digital and intelligent solutions, services throughout the whole product life cycle, and individual and intelligent assembly and testing solutions, together with innovative production processes and technology.

Market-Specific solution:

- Examine the extensive array of Bosch products and solutions tailored to your business and market.
 - From the creation, delivery, and storage of hydrogen to the many uses it can have as an energy source. We provide goods and services to our clients at every stage of the hydrogen value chain. Our goal is always to shape the energy landscape of the future.
 - Bosch is making the future's structures and environs more vivacious, alluring, and environmentally friendly places for people to be. These interconnected buildings are interactive communities where individuals are in tune with their building and one other, making daily living simple and effective.
 - Bosch Origify has created a novel technique to stop counterfeiting by
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taking pictures of products' distinctive surface patterns and comparing them to the real ones. This offers manufacturers an efficient end-to-end traceability solution along with a secure and sustainable authentication solution.

- Bosch Climate Solutions offers individual consulting services based on extensive industry knowledge and creates customised sustainability concepts to support and guide clients on the path to climate neutrality.

Area of Operation:

The Bosch Group is one of the world's leading technology and service providers. It has approximately 421,000 associates worldwide (as of December 31, 2022). The company generated revenue of 88.2 billion euros in 2022. Its operations are divided into four business segments: Mobility, Industrial Technology, Consumer Goods, Energy and Construction Technology. As a leading IoT supplier, Bosch offers innovative solutions for smart homes, Industry 4.0 and connected mobility. Bosch pursues its vision of sustainable, safe and enjoyable mobility. It uses expertise in sensor technology, software and services, and its own IoT cloud to provide customers with multi-domain connectivity solutions from a single source. The Bosch Group's strategic goal is to make connected life easier with products and solutions that contain artificial intelligence (AI) or are developed or produced with the help of artificial intelligence. Create. Bosch improves the quality of life around the world with innovative products and services that inspire enthusiasm. In short, Bosch creates technology "invented for life".

Mobility:

- Bosch is involved in a broad range of activities as an original equipment provider to the automotive industry, which are divided into six divisions. The divisions of Bosch eBike Systems and Automotive Aftermarket are also
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included in the business sector. Additional activities include off-highway and commercial vehicles, two-wheelers, and software and engineering services.

Industrial Technology:

- This business sector consists of the Bosch Manufacturing Solutions business unit, which mainly offers in-house assembly services, the Bosch Connected Industry business unit, and the Drive and Control Technology division.

Consumer Goods:

- The two divisions Power Tools and BSH Hausgeräte make up this business area.
- Energy and Building Technology
- This industry comprises the Robert Bosch Smart Home unit in addition to the Building Technologies, Home Comfort, and Bosch Global Service Solutions businesses.

Ownership pattern:

The entrepreneurial independence of the Bosch Group is ensured by Robert Bosch GmbH's unique ownership structure, which allows the business to plan long-term and make large upfront expenditures to secure its future. Robert Bosch Stiftung GmbH is a non-profit organization that owns 94% of Robert Bosch GmbH's share capital. The industrial trust Robert Bosch Industrietreuhand KG is the owner of the majority of voting rights. The trust is responsible for carrying out the entrepreneurial ownership functions.

Robert Bosch Stiftung GmbH has been pursuing the public welfare initiatives of its founder since its founding in 1964. It facilitates the development of workable answers to societal problems. It can offer support in the form of funding for initiatives from outside parties, partnerships, and its own projects. The dividend that the Stiftung gets as a shareholder in Robert Bosch GmbH is used to fund its

operations.

Competitors Information:

ElectraEV, Vitesco Technologies, Autotalks, and NoTraffic are among Robert Bosch's main rivals. There are 200 current rivals for Robert Bosch.

Visteon:

- Electronics and AI-enabled systems for linked and self-driving cars. It provides a range of connected car solutions, including infotainment systems, V2X-based telematics, heads-up displays, and over-the-air software updates. Solutions for cybersecurity and more. It provides solutions for self-driving cars by collecting input data from many sensors to comprehend the surroundings and choose the best course of action.

Autotalks:

- Autotalks is a semiconductor fabless firm that specializes on V2X applications. In partnership with top semiconductor companies and automakers, it offers V2X communication modules that let cars talk to each other and exchange data with roadside infrastructure. The company's chipsets handle a number of V2X communication-related concerns, such as vehicle installation, positioning precision, security, and communication dependability. Applications for the system include truck platooning, connected automobile safety, autonomous cars, and smart infrastructure.

Vitesco Technologies :

- Powertrain system developer for automobiles across multiple categories. Its product line includes electric drives, 48-volt electrification systems, and power electronics for battery-electric and hybrid cars. It provides options for two-wheeled transportation, commercial vehicles, and automobiles. It provides combustion systems, electricity, and other things as well.

NoTraffic :

- Automated traffic management systems for traffic operators with AI support. It provides plug-and-play gadgets that make the traffic lights more efficient. By utilizing machine vision algorithms and radar, it is able to identify and categorize users on the road. Cyber-secured, V2X enabler, digital payments, and other features are among its features.

Infrastructure Facilities:

In the domains of consumer goods, energy and building technology, industrial technology, mobility solutions, and consumer goods, Bosch is a prominent provider of technology and services in India. Furthermore, Bosch maintains the largest non-German development centre for end-to-end engineering and technology solutions in India. The Bosch Group has twelve companies operating in India: Robert Bosch Automotive Steering Private Limited, Auto mobility Services and Solutions Private Limited, 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, and Miviv Eng. Technologies Private Limited. Since its 1951 establishment, Bosch has expanded its manufacturing operations in India to comprise 16 manufacturing facilities and 7 development and application centres.

Achievement Awards:

- **CII AWARDS:**
- Selected as the 2022 CII "Excellence in Water Management" winner.
- Awarded the CII's "Excellent Energy Efficient Unit" designation for 2022.
- The CII Award, given for outstanding water management.
- At the National Energy Efficiency Circle Competition (CII), Nashik won three honours.

The winners of the 2022 Golden Peacock Award for Excellence in Corporate Governance in the "Automobile Ancillary" category were announced as Bosch Limited. The jury, chaired by Hon. Justice M. N. Venkatachaliah, a former Chief Justice of India and former chairman of the National Human Rights Commission of India and the National Commission for Constitution of India Reforms, made this announcement. During "IOD's 2022 Annual London Global Convention on Corporate Governance & Sustainability," which took place in November 2022, business and industry leaders witnessed the presentation of the Golden Peacock Awards Trophy and Certificate on Thursday, November 10, 2022, in London (UK).

Bosch received a number of awards for its corporate social responsibility (CSR) performance in 2022. The most significant awards are Golden Peacock Awards for Corporate Social Responsibility (CSR) - 2022, awarded to Bosch for its continued commitment to CSR and overall skill development. AIMA Award for Excellence in Corporate Social Responsibility - 2022, given to Bosch for the work it has done for the benefit of the people of the country. This award was presented to Bosch in recognition of the project 'Reverse Osmosis(RO) Plants', which provides safe and clean drinking water to the 22,500+ families living in the Jaipur area of Jaipur .Bosch was named as a Case Study in a Best Practices Compendium of ESG and CSR, Benchmarking Best Practices in India, published by IICA.NHRD Award for Best Practice in CSR-2022, awarded to BIF for Artisan Training Program for Skilling Youth in Carpentry and Electrical and Plumbing.

Strategic perspectives plans:

Developing and setting high-level goals for an organization with a clear purpose and direction, creating action plans, allocating resources effectively, spotting opportunities, taking advantage of competitive advantages, seizing opportunities, controlling business risks, and creating strategic plans are all skills that strategic management possesses. The strategic goal of the Bosch Group is to enable linked living through the use of goods and solutions that either use artificial intelligence (AI) or were created or produced with its assistance. Bosch provides new and exciting products and services that enhance people's lives all around the world.

Recent Trends:

Digitalization: Digitalization has long been a popular topic at Bosch. We've been adding more digital products to our portfolios and integrating software into more of our solutions; this trend will continue in 2022. Value streams in the Factory of the Future are totally digital. Real-time digital representations of hardware modules and functionalities are provided. Software solutions gather and prepare data for analysis, enhancing every step of the value stream's operations and boosting efficiency, productivity, and transparency.

Sustainability: Our pragmatic approach at Bosch Rexroth has the potential to significantly reduce consumption and lower CO2 emissions in a sustainable manner. Our goods and solutions are developed with the knowledge we learned by converting our own plants to climate neutrality, so not only are we lessening our own environmental impact but also that of our customers. Customers and end users receive twice the extra value from our selection of More and Less goods. They not only lessen detrimental effects on the environment and society, but they also contribute to increased profitability by boosting flexibility and productivity. Our portfolios for Mobile Machines, Connected Hydraulics, and Factory of the Future all have more and less goods available, and this will be one of our main areas of focus until 2022.

Electrification: The market for mobile machines is always seeking for ways to increase performance and productivity, decrease operating costs through efficiency, and cut back on noise and exhaust gas emissions. We created our eLION solutions, a new 700V electric portfolio that makes it possible for mobile machine makers to realise electric vehicle layouts, in order to satisfy these needs. High-voltage motor-generators and inverters, along with our gear units and hydraulics, form the foundation of our new range. Software completes the picture. As a result, there is a noticeable decrease in noise, local zero emission operation, and an extremely efficient system overall.

Diversity: Bosch employs almost 29,600 individuals in more than 80 countries, and we view our diversity as a strength. However, we also recognise that more diversity must be achieved, which is why it is a key component of our policy for cultural

change. We are putting it into practice in a big way, such with our new Customer and Innovation Centre in Ulm. Here, workers representing eighteen nations—from youthful innovators to seasoned experts—collaborate to exchange concepts and create breakthroughs that will assist our clients.

AIOT: It must be reliable, though, for this new technology to gain acceptance. The technology and data must be safe, technically sound, transparent, secure against cyberattacks, and ultimately controlled by humans for buyers and users to feel comfortable using it. All of our AIoT solutions fulfil these requirements. Bosch is a co-initiator of the Digital Trust Forum, an international initiative that aims to create and specify the foundation for reliable digital AIoT solutions. Bosch has also acknowledged this problem facing the industry. With a variety of our products, Bosch Rexroth is already offering our clients the advantages of AI. For instance, the ctrlX Configurator, one of our expert systems, assists designers in developing the ideal layout and setup for a whole system solution. Furthermore, our AI-powered software utilises Smart Item Picking to identify items that need to be picked up and determine the most efficient way to do it.

Responsive and availability: Our global footprint, spanning over 80 countries, guarantees our experts' local availability to our customers. Furthermore, we are broadening our worldwide reach by collaborating with regional Certified Excellence (CE) Partners, thereby expediting and simplifying the process for clients to obtain our goods, services, and solutions. They will offer the same calibre of skill and knowledge as our own employees since they are certified to our exacting standards. Local partners give a distinctive one-stop shopping experience by adding their own services and goods from other suppliers to our offering.

Chapter-2

Financial and Market Analysis

Financial analysis:

Analyse the company's financial statement:

- Statement of profit and loss
- Statement of financial position
- Statement of cash flow

- Statement of profit and loss:

PROFIT & LOSS ACCOUNT OF BOSCH (in Rs. Cr.)	MAR 23	MAR 22	MAR 21	MAR 20	MAR 19
	12 mths	12 mths	12 mths	12 mths	12 mths
INCOME					
REVENUE FROM OPERATIONS [GROSS]	14,611.80	11,553.40	9,485.20	9,514.60	11,873.70
Less: Excise/Sevice Tax/Other Levies	0.00	0.00	0.00	0.00	0.00
REVENUE FROM OPERATIONS [NET]	14,611.80	11,553.40	9,485.20	9,514.60	11,873.70
TOTAL OPERATING REVENUES	14,929.30	11,781.60	9,718.00	9,841.60	12,085.00
Other Income	473.40	396.30	504.00	546.60	595.40
TOTAL REVENUE	15,402.70	12,177.90	10,222.00	10,388.20	12,680.40

EXPENSES					
Cost Of Materials Consumed	3,269.10	2,770.50	2,335.50	2,304.70	2,875.60
Purchase Of Stock-In Trade	6,333.40	4,803.20	3,589.40	2,781.30	3,967.60
Operating And Direct Expenses	0.00	0.00	0.00	0.00	0.00
Changes In Inventories Of FG,WIP And Stock-In Trade	-139.70	-275.10	-152.30	223.40	-168.00
Employee Benefit Expenses	1,145.90	1,072.00	931.60	1,268.50	1,350.70
Finance Costs	12.10	28.90	14.00	10.20	13.30
Depreciation And Amortisation Expenses	385.60	324.30	341.40	383.30	402.20
Other Expenses	2,513.90	1,954.00	1,851.40	1,780.40	1,905.00
TOTAL EXPENSES	13,520.30	10,677.80	8,911.00	8,751.80	10,346.40
PROFIT/LOSS BEFORE EXCEPTIONAL, EXTRAORDINARY ITEMS AND TAX	1,882.40	1,500.10	1,311.00	1,636.40	2,334.00
Exceptional Items	0.00	0.00	-743.90	-716.70	0.00
PROFIT/LOSS BEFORE TAX	1,882.40	1,500.10	567.10	919.70	2,334.00
TAX EXPENSES-CONTINUED OPERATIONS					
Current Tax	421.50	278.40	192.80	352.40	758.90
Less: MAT Credit Entitlement	0.00	0.00	0.00	0.00	0.00
Deferred Tax	0.00	0.00	0.00	0.00	35.50

Tax For Earlier Years	12.30	-85.40	-29.80	-19.90	-53.80
TOTAL TAX EXPENSES	457.90	282.90	84.60	334.90	740.60
PROFIT/LOSS AFTER TAX AND BEFORE EXTRAORDINARY ITEMS	1,424.50	1,217.20	482.50	584.80	1,593.40
PROFIT/LOSS FROM CONTINUING OPERATIONS	1,424.50	1,217.20	482.50	584.80	1,593.40
PROFIT/LOSS FOR THE PERIOD	1,424.50	1,217.20	482.50	649.80	1,598.00
OTHER ADDITIONAL INFORMATION					
EARNINGS PER SHARE					
Basic EPS (Rs.)	482.99	413.00	164.00	220.00	525.00
Diluted EPS (Rs.)	482.99	413.00	164.00	220.00	525.00
VALUE OF IMPORTED AND INDIGENIOUS RAW MATERIALS STORES, SPARES AND LOOSE TOOLS					
Imported Raw Materials	0.00	0.00	0.00	0.00	0.00
Indigenous Raw Materials	0.00	0.00	0.00	0.00	0.00
STORES, SPARES AND LOOSE TOOLS					
Imported Stores And Spares	0.00	0.00	0.00	0.00	0.00
Indigenous Stores And Spares	0.00	0.00	0.00	0.00	0.00
DIVIDEND AND DIVIDEND PERCENTAGE					
Equity Share Dividend	1,209.20	339.20	309.70	309.70	305.20

Tax On Dividend	0.00	0.00	0.00	63.60	62.70
Equity Dividend Rate (%)	4,800.00	2,100.00	1,150.00	1,050.00	1,050.00

• **Statement of Financial position :**

BALANCE SHEET OF BOSCH (in Rs. Cr.)	MAR 23	MAR 22	MAR 21	MAR 20	MAR 19
	12 mths	12 mths	12 mths	12 mths	12 mths
EQUITIES AND LIABILITIES					
SHAREHOLDER'S FUNDS					
Equity Share Capital	29.50	29.50	29.50	29.50	29.50
TOTAL SHARE CAPITAL	29.50	29.50	29.50	29.50	29.50
Reserves and Surplus	10,982.70	10,658.40	9,792.60	9,239.90	9,096.70
TOTAL RESERVES AND SURPLUS	10,982.70	10,658.40	9,792.60	9,239.90	9,096.70
TOTAL SHAREHOLDERS FUNDS	11,012.20	10,687.90	9,822.10	9,269.40	9,126.20
NON-CURRENT LIABILITIES					
Long Term Borrowings	0.00	0.00	0.00	0.00	0.00
Deferred Tax Liabilities [Net]	0.00	0.00	0.00	0.00	0.00
Other Long Term Liabilities	114.20	171.90	221.30	54.80	10.70
Long Term Provisions	109.50	244.90	238.20	326.80	341.60
TOTAL NON-CURRENT LIABILITIES	223.70	416.80	459.50	381.60	352.30

CURRENT LIABILITIES					
Short Term Borrowings	0.00	0.00	0.00	0.00	0.00
Trade Payables	2,725.30	2,240.40	2,223.00	1,605.00	1,577.50
Other Current Liabilities	1,158.60	945.50	1,195.80	772.90	878.70
Short Term Provisions	1,139.60	1,119.80	1,073.10	1,291.10	774.90
TOTAL CURRENT LIABILITIES	5,023.50	4,305.70	4,491.90	3,669.00	3,231.10
TOTAL CAPITAL AND LIABILITIES	16,259.40	15,410.40	14,773.50	13,320.00	12,709.60
ASSETS					
NON-CURRENT ASSETS					
Tangible Assets	1,200.30	1,094.30	1,108.90	1,195.40	1,010.80
Intangible Assets	0.00	0.00	0.00	0.00	0.00
Capital Work-In-Progress	365.50	605.40	487.80	487.00	644.20
Other Assets	531.00	117.20	131.80	146.60	164.90
FIXED ASSETS	2,096.80	1,816.90	1,728.50	1,829.00	1,819.90
Non-Current Investments	4,332.50	4,415.40	3,429.50	3,744.70	3,816.70
Deferred Tax Assets [Net]	378.10	416.10	505.90	456.60	459.60
Long Term Loans And Advances	17.90	23.20	26.30	109.60	106.30
Other Non-Current Assets	598.00	382.60	321.10	160.90	64.00
TOTAL NON-CURRENT ASSETS	7,423.30	7,054.20	6,011.30	6,300.80	6,266.50
CURRENT ASSETS					
Current Investments	690.10	1,112.10	1,727.60	296.80	237.10

Inventories	1,902.90	1,729.30	1,298.50	1,115.90	1,444.30
Trade Receivables	1,902.90	1,526.70	1,389.40	1,413.00	1,567.50
Cash And Cash Equivalents	2,056.90	1,705.40	2,450.50	2,256.00	1,252.70
Short Term Loans And Advances	1,060.30	929.90	525.50	609.20	458.70
OtherCurrentAssets	1,223.00	1,352.80	1,370.70	1,328.30	1,482.80
TOTAL CURRENT ASSETS	8,836.10	8,356.20	8,762.20	7,019.20	6,443.10
TOTAL ASSETS	16,259.40	15,410.40	14,773.50	13,320.00	12,709.60
OTHER ADDITIONAL INFORMATION					
CONTINGENT LIABILITIES, COMMITMENTS					
Contingent Liabilities	224.90	299.40	287.10	378.40	433.70
CIF VALUE OF IMPORTS					
Raw Materials	0.00	0.00	0.00	0.00	0.00
Stores, Spares And Loose Tools	0.00	0.00	0.00	0.00	0.00
Trade/Other Goods	0.00	0.00	0.00	0.00	0.00
Capital Goods	0.00	0.00	0.00	0.00	0.00
EXPENDITURE IN FOREIGN EXCHANGE					
Expenditure In Foreign Currency	6,159.20	4,417.40	3,041.44	2,214.80	4,419.20
REMITTANCES IN FOREIGN CURRENCIES FOR DIVIDENDS					

Dividend Remittance In Foreign Currency	--	--	--	--	--
EARNINGS IN FOREIGN EXCHANGE					
FOB Value Of Goods	1,474.50	1,305.50	860.60	786.90	899.90
Other Earnings	1,375.90	1,307.90	1,118.53	486.00	1,069.30
BONUS DETAILS					
Bonus Equity Share Capital	27.33	27.33	27.33	27.33	27.33
NON-CURRENT INVESTMENTS					
Non-Current Investments Quoted Market Value	4,273.10	4,471.90	3,452.50	3,762.10	3,846.00
Non-Current Investments Unquoted Book Value	29.60	29.00	0.90	--	0.50
CURRENT INVESTMENTS					
Current Investments Quoted Market Value	720.70	1,112.10	1,727.90	296.80	237.10
Current Investments Unquoted Book Value	--	--	--	--	--

- **Statement of Cash flow:**

CASH FLOW OF BOSCH (in Rs. Cr.)	MAR 23	MAR 22	MAR 21	MAR 20	MAR 19
	12 mths	12 mths	12 mths	12 mths	12 mths
NET PROFIT/LOSS BEFORE EXTRAORDINARY ITEMS AND TAX	1,883.40	1,501.20	566.60	1,006.50	2,341.30
Net CashFlow From Operating Activities	1,213.70	269.30	715.40	1,336.10	593.20
Net Cash Used In Investing Activities	261.70	-31.80	-343.50	-872.90	1,765.90
Net Cash Used From Financing Activities	-1,239.40	-383.10	-338.20	-399.00	-2,530.80
Foreign Exchange Gains / Losses	0.00	0.00	0.00	0.00	0.00
Adjustments On Amalgamation Merger Demerger Others	0.00	0.00	0.00	0.00	0.00
NET INC/DEC IN CASH AND CASH EQUIVALENTS	236.00	-145.60	33.70	64.20	-171.70
Cash And Cash Equivalents Begin of Year	143.30	288.90	255.20	191.00	362.70
Cash And Cash Equivalents End Of Year	379.30	143.30	288.90	255.20	191.00

Financial ratios:

Liquidity Ratio:

Liquidity ratios assess a company's ability to meet its short-term obligations using its liquid assets. The two common liquidity ratios are the Current Ratio and the Quick Ratio (also known as the Acid-Test Ratio).

1. Current Ratio: $\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$
 $\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$

2. Quick Ratio (Acid-Test Ratio): $\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$
 $\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$

Profitability ratio:

Common profitability ratios include:

1. **Net Profit Margin:**
 $\text{Net Profit Margin} = \left(\frac{\text{Net Profit}}{\text{Revenue}} \right) \times 100$
 $\text{Net Profit Margin} = \left(\frac{\text{Net Profit}}{\text{Revenue}} \right) \times 100$
2. **Return on Assets (ROA):**
 $\text{ROA} = \left(\frac{\text{Net Profit}}{\text{Average Total Assets}} \right) \times 100$
 $\text{ROA} = \left(\frac{\text{Net Profit}}{\text{Average Total Assets}} \right) \times 100$
3. **Return on Equity (ROE):**
 $\text{ROE} = \left(\frac{\text{Net Profit}}{\text{Average Shareholders' Equity}} \right) \times 100$
 $\text{ROE} = \left(\frac{\text{Net Profit}}{\text{Average Shareholders' Equity}} \right) \times 100$

Turnover Ratio:

1. **Inventory Turnover:**
 $\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold (COGS)}}{\text{Average Inventory}}$
 $\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold (COGS)}}{\text{Average Inventory}}$
 - To find the inventory turnover ratio for Bosch, you would need to check the company's income statement for the COGS and the balance sheet for the average inventory.
2. **Asset Turnover:**
 $\text{Asset Turnover} = \frac{\text{Revenue}}{\text{Average Total Assets}}$
 $\text{Asset Turnover} = \frac{\text{Revenue}}{\text{Average Total Assets}}$
 - To find the asset turnover ratio for Bosch, you would need to check the company's income statement for revenue and the balance sheet for average total assets.

Market Analysis:

Evaluate the company's position within its industry:

1. **Market Leadership:**
 - Assess Bosch's market share and position within its industry. Look at how it compares to competitors and whether it is a market leader or has a

significant market presence.

2. **Financial Performance:**

- Analyze Bosch's recent financial statements, including revenue growth, profitability, and return on investment. Compare these metrics with industry benchmarks to gauge financial strength.

3. **Innovation and Technology:**

- Evaluate Bosch's commitment to innovation and technology. In industries like manufacturing and engineering, technological advancements and innovation are crucial for staying competitive.

4. **Product Portfolio:**

- Examine the diversity and competitiveness of Bosch's product portfolio. A broad and innovative product range can contribute to market strength.

5. **Global Presence:**

- Consider Bosch's global reach. A widespread international presence can indicate adaptability to diverse markets and exposure to various economic conditions.

6. **Customer Satisfaction:**

- Explore customer satisfaction metrics and feedback. Satisfied customers are likely to contribute to repeat business and positive brand reputation.

7. **Environmental, Social, and Governance (ESG) Practices:**

- Evaluate Bosch's ESG practices. In today's business landscape, companies are increasingly evaluated based on their commitment to environmental sustainability, social responsibility, and strong governance.

8. **Strategic Partnerships and Alliances:**

- Assess any strategic partnerships or alliances that Bosch has formed. Collaborations can contribute to increased capabilities and market reach.

9. **Regulatory Compliance:**

- Consider Bosch's adherence to industry regulations and standards. Compliance is crucial for avoiding legal issues and maintaining a positive image.

10. **Competitive Advantage:**

- Identify any unique competitive advantages that Bosch possesses, such as proprietary technologies, strong brand recognition, or cost leadership.
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11. Management Team:

- Evaluate the expertise and experience of Bosch's management team. Strong leadership is essential for making strategic decisions and navigating industry challenges.

Market trends:**1. Technological Innovation:**

- Bosch operates in various industries, including automotive technology, industrial technology, consumer goods, and energy. Technological innovation, particularly in areas such as electric and autonomous vehicles, smart home solutions, and Industry 4.0, has been a significant trend.

2. Electrification in Automotive:

- Bosch has been actively involved in the automotive industry, and a major trend in recent years has been the shift towards electric and hybrid vehicles. Bosch has been a key player in providing components and technologies for electric and autonomous vehicles.

3. Smart Home and Internet of Things (IoT):

- Bosch has a presence in the smart home and IoT markets. The trend towards connected devices and smart home solutions has been growing, and Bosch has been contributing to this trend with products related to security, home automation, and energy efficiency.

4. Sustainability and ESG:

- Across industries, there has been a growing focus on sustainability and Environmental, Social, and Governance (ESG) practices. Companies, including Bosch, are increasingly expected to demonstrate commitment to sustainable business practices.

5. Industry 4.0 and Automation:

- In the industrial sector, the trend towards Industry 4.0, characterized by increased automation, data exchange, and the use of emerging technologies like artificial intelligence, has been prominent. Bosch has been involved in providing solutions for smart manufacturing and industrial automation.

6. Mobility Solutions:

- Bosch has a significant presence in mobility solutions, including automotive technologies and mobility services. Trends in urban mobility, autonomous vehicles, and shared transportation have influenced Bosch's strategies and offerings.

7. Digital Transformation:

- The broader trend of digital transformation has impacted various industries. Bosch, as a technology and engineering company, has likely been investing in digital technologies to enhance its products and services.
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Competition:

1. Automotive Technology:

- **Competitors:** Continental AG, Denso Corporation, Magna International, Valeo, Delphi Technologies.

2. Industrial Technology:

- **Competitors:** Siemens AG, ABB Ltd, General Electric, Schneider Electric, Rockwell Automation.

3. Consumer Goods and Appliances:

- **Competitors:** Whirlpool Corporation, Samsung Electronics, LG Electronics, Electrolux, Siemens Home Appliances.

4. Energy and Building Technology:

- **Competitors:** Honeywell International, Schneider Electric, Siemens AG, Johnson Controls, ABB Ltd.

5. Packaging Technology:

- **Competitors:** Tetra Pak, Krones AG, ProMach, Sidel Group, Multivac.

6. Power Tools:

- **Competitors:** Stanley Black & Decker, Makita Corporation, Hilti, Techtronic Industries (TTI), Hitachi Koki (Metabo).

7. Security Systems:

- **Competitors:** Honeywell Security Solutions, Siemens Building Technologies, Johnson Controls, ADT, Securitas

Potential growth opportunities:

1. Electric and Autonomous Vehicles:

- As the automotive industry undergoes a significant transformation toward electric and autonomous vehicles, Bosch, with its expertise in automotive technologies, has the opportunity to play a key role in providing components and systems for these vehicles.

2. Smart Cities and Mobility Solutions:

- With the rise of smart cities and connected mobility solutions, Bosch can explore opportunities in providing technologies for intelligent transportation systems, traffic management, and solutions that enhance urban mobility.

3. Industry 4.0 and Automation:

- Bosch has a strong presence in industrial technology. The ongoing trend of Industry 4.0, characterized by the integration of digital technologies into manufacturing, provides growth opportunities for Bosch to offer advanced automation and smart manufacturing solutions.

4. IoT and Connected Devices:

- The increasing adoption of Internet of Things (IoT) devices presents opportunities for Bosch to expand its portfolio of connected products, especially in areas such as smart homes, smart appliances, and industrial IoT applications.

5. Renewable Energy and Sustainability:

- Bosch can capitalize on the growing demand for renewable energy solutions and sustainability initiatives. This includes providing technologies for renewable energy generation, energy storage systems, and energy-efficient products.

6. Digital Transformation Services:

- Offering digital transformation services to businesses across various industries can be a growth area. This may include services related to data analytics, artificial intelligence, and software solutions.

7. Healthcare Technologies:

- Bosch's expertise in technology and sensors can be leveraged in the healthcare sector. This may involve developing innovative healthcare technologies, medical devices, and solutions for patient care and diagnostics.

8. Cybersecurity Solutions:

- With the increasing importance of cybersecurity in the digital age, Bosch can explore opportunities in providing cybersecurity solutions for connected devices, industrial systems, and automotive technologies.

9. Smart Building Technologies:

- Bosch can continue to expand its presence in the building technologies sector by offering smart building solutions, including energy management systems, security systems, and intelligent building automation.

10. Emerging Markets and Global Expansion:

- Exploring opportunities in emerging markets and expanding its global footprint can contribute to Bosch's growth. This may involve tailoring products and services to meet the specific needs of diverse regions.

11. Water and Environmental Technologies:

- Bosch can explore growth opportunities in water and environmental technologies, developing solutions for water conservation, environmental monitoring, and sustainable resource management.
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Chapter-3

Management and leadership

Leadership:

1. Volkmar Denner (Chairman of the Board of Management):



- Dr. Volkmar Denner served as the Chairman of the Board of Management of Robert Bosch GmbH. He has a background in physics and has been associated with Bosch for many years, contributing to the company's technological advancements and strategic direction.

2. Stefan Asenkerschbaumer (Deputy Chairman of the Board of Management and CFO):

- Stefan Asenkerschbaumer has served as the Deputy Chairman of the Board of Management and Chief Financial Officer (CFO) of Bosch. His

responsibilities include overseeing financial matters and contributing to the company's strategic decisions.

3. **Christoph Kübel (Labor Director and Member of the Board of Management):**

- Christoph Kübel has been associated with Bosch for many years and has served as the Labor Director and a member of the Board of Management. He plays a crucial role in labor relations and human resources.

4. **Dr. Stefan Hartung (Member of the Board of Management):**

- Dr. Stefan Hartung has been responsible for the Bosch Mobility Solutions business sector. He has contributed to the development and implementation of strategies related to automotive technologies and mobility solutions.

5. **Dr. Michael Bolle (Chief Digital Officer and Chief Technology Officer):**

- Dr. Michael Bolle has held roles as Chief Digital Officer and Chief Technology Officer at Bosch. His responsibilities include driving digital transformation and advancing technology initiatives.

Company's corporate governance:

Bosch is a global company with a diverse range of business activities, and its leadership team typically includes individuals with expertise in various fields such as engineering, technology, finance, and management. Below are some key individuals who were part of Bosch's leadership team as of my last update:

1. **Volkmar Denner (Chairman of the Board of Management):**

- Dr. Volkmar Denner served as the Chairman of the Board of Management of Robert Bosch GmbH. He has a background in physics and has been associated with Bosch for many years, contributing to the company's technological advancements and strategic direction.

2. **Stefan Asenkerschbaumer (Deputy Chairman of the Board of Management and CFO):**

- Stefan Asenkerschbaumer has served as the Deputy Chairman of the Board of Management and Chief Financial Officer (CFO) of Bosch. His responsibilities include overseeing financial matters and contributing to the company's strategic decisions.

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4. **Dr. Stefan Hartung (Member of the Board of Management):**

- Dr. Stefan Hartung has been responsible for the Bosch Mobility

Solutions business sector. He has contributed to the development and implementation of strategies related to automotive technologies and mobility solutions.

5. **Dr. Michael Bolle (Chief Digital Officer and Chief Technology Officer):**

- Dr. Michael Bolle has held roles as Chief Digital Officer and Chief Technology Officer at Bosch. His responsibilities include driving digital transformation and advancing technology initiatives.

Company's corporate governance:

As of my last knowledge update in January 2022, Bosch has been known for maintaining a robust corporate governance framework. Corporate governance refers to the system of rules, practices, and processes by which a company is directed and controlled. It involves balancing the interests of a company's many stakeholders, such as shareholders, management, customers, suppliers, financiers, government, and the community.

Here are some general aspects of Bosch's corporate governance based on historical information:

1. **Board Structure:**

- Bosch typically has a two-tier board structure with a Supervisory Board and a Management Board. The Supervisory Board oversees the Management Board and represents the interests of shareholders.

2. **Supervisory Board:**

- The Supervisory Board is responsible for appointing and supervising the Management Board. It also plays a crucial role in decision-making processes related to significant corporate matters.

3. **Management Board:**

- The Management Board is responsible for the day-to-day management of the company. Members of the Management Board typically have specific areas of responsibility, such as finance, technology, or operations.

4. **Shareholder Rights:**

- Bosch aims to protect the rights of its shareholders and ensures that they have access to relevant information. The company may hold regular shareholder meetings, where important decisions are made.

5. **Code of Conduct and Ethics:**

- Bosch usually has a comprehensive Code of Conduct that outlines the ethical principles and values to which employees and management are expected to adhere.

6. **Risk Management:**

- Effective risk management practices are typically in place to identify, assess, and manage various risks that the company may face in its operations.

7. **Transparency and Reporting:**

- Bosch is known for providing transparent and comprehensive financial reporting. The company typically releases annual reports, sustainability reports, and other communications to keep stakeholders informed.

8. **Sustainability and Corporate Social Responsibility (CSR):**

- Bosch emphasizes sustainability and corporate social responsibility in its operations. This includes initiatives related to environmental protection, social responsibility, and ethical business practices.

9. **Innovation and Research:**

- As a technology and engineering company, Bosch focuses on innovation and research. The corporate governance framework likely supports the company's commitment to technological advancement.

Decision making process:

1. **Identification of the Issue or Opportunity:**

- The decision-making process typically starts with the identification of a specific issue, challenge, or opportunity that requires a decision. This could arise from various sources, including market changes, technological advancements, or internal organizational needs.

2. **Problem Definition and Analysis:**

- Once the issue is identified, there is a thorough process of defining and analyzing the problem. This involves gathering relevant data, assessing the impact of the issue on the organization, and understanding the root causes.

3. **Setting Objectives:**

- Clear objectives are established to guide the decision-making process. These objectives help in determining the desired outcomes and criteria for evaluating potential solutions.

4. **Generation of Alternatives:**

- Multiple potential solutions or alternatives are generated. This stage often involves brainstorming sessions, consultations with relevant stakeholders, and considering a range of options.

5. **Evaluation of Alternatives:**

- The generated alternatives are then evaluated against the established objectives and criteria. This evaluation may involve a cost-benefit analysis, risk assessment, and consideration of other relevant factors.

6. **Decision-Making:**

- A decision is made based on the evaluation of alternatives. In Bosch's case, decisions may be made by the executive leadership, management teams, or relevant decision-making bodies, depending on the nature and significance of the decision.

7. **Implementation Planning:**

- Once a decision is made, a detailed plan for implementation is developed. This includes assigning responsibilities, allocating resources, and establishing a timeline for execution.

8. **Implementation:**

- The plan is executed, and the decision is put into action. This stage involves coordinating activities, monitoring progress, and addressing any unforeseen challenges that may arise during implementation.

9. **Monitoring and Evaluation:**

- After implementation, the decision's outcomes are monitored and evaluated. This step involves assessing whether the decision has achieved the desired results and making adjustments if necessary.

10. **Feedback and Learning:**

- Feedback loops are established to capture insights from the decision-making process. Lessons learned are documented and used to improve future decision-making processes.
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CHAPTER-4

SWOT ANALYSIS

Introduction:

A SWOT analysis's four main components are your company's opportunities, weaknesses, threats, and strengths. It can be applied to several projects for a single department or for the entire company or group. SWOT analysis is a useful tool for evaluating the performance of a particular project, such as an internet advertising campaign, in relation to early estimates. At the organizational level, they are most commonly used to evaluate how well a company is aligned with its growth trajectories and success standards. The primary objective of a SWOT analysis is to help businesses completely comprehend all the factors involved in making a decision. This tactic was created in the 1960s by Stanford Research Institute's Albert Humphrey as a result of research to ascertain the causes of business plannings recurring failures. Ever since its origin, SWOT analysis has proven to be one of the most useful tools for business owners looking to start and grow their companies.

In other words, a SWOT analysis looks at internal and external difficulties (we shall learn about these elements later) together with what's happening inside and outside of your company. As such, while you will have some control over certain elements, you won't have influence over others. In any case, it will become clearer what to do next once you have as many factors as possible recognized, noted, and taken into account. It could help you confront shaky assumptions and detect dangerous blind spots on how your company operates. If you use it carefully and cooperatively, it might offer new insights into where your business is at the moment and help you come up with the best plan possible for any situation. For

example, you may know exactly what your company's strengths are, but unless you put them on a list with its weaknesses and risks, you may not realize how dependable they really are. In a similar vein, while you undoubtedly worry about some of your company's weaknesses, a thorough investigation may reveal a previously undiscovered possibility that more than makes up for them.

Strength of Bosch:

Bosch, one of the top companies in the sector, has a number of benefits that contribute to its commercial success. It can grow into new industries and hold onto its market share in already established ones because to these advantages.

The following are some of the strengths.

- 3800 patents and a strong emphasis on research & development.
- Loyalty to clients and product quality.
- Balanced portfolio across multiple industries.
- Foothold International.
- Key component competency for automobiles.
- Present research demonstrates robust EPS increase in net cash and cash flow.
- The most recent quarter saw strong increase.
- A rise in net profit and a higher profit margin.
- The corporation with no debt.
- A rise in income over the previous three quarters each.
- Gains in each of the three quarters.
- Zero Promoter Business.
- FII/FPI or establishments with higher equity.
- Strong Impulse: Prices that move higher than normal across the short, medium, and long terms.

Weakness of Bosch:

There are certain places where Bosch can do better. Using SWOT analysis, a corporation can increase its competitive advantage and strategic stance by

addressing its vulnerabilities. Strategy is about making decisions.

The following are some of the weaknesses:

- Time to satisfy shifting consumer demands.
- Employee productivity.
- Heavily process-oriented.
- A decrease in income and profit.
- A yearly decline in net profit over the previous two years.
- It has been challenging for businesses with disparate work cultures to integrate.
- The product's marketing is appallingly insufficient.
- Compared to the industry average, Bosch's profitability ratio and net contribution percentage are lower.
- Compared to the fastest-growing companies in the industry, less money is invested in R&D.
- Its success has been patchy outside of its primary business.
- The company lost a small portion of the market in specialized fields as a result of its inability to handle the difficulties presented by new competitors.

Opportunities at Bosch:

- The market for long-lasting and high-quality products.
 - The renewable energy sector.
 - Producing Hybrid car parts.
 - Novel products and cutting-edge technologies.
 - Bosch goods are also available for purchase by federal and state government contractors thanks to the government's green drive.
 - Stable free cash flow enables investments in adjacent product categories.
 - Inflation is on the decline.
 - The new tax law may have a significant effect on corporate operations and present fresh chances for well-established companies like Bosch to increase their profitability.
 - Following years of economic downturn and low sector growth, Bosch now has a chance to improve market share and attract new clients thanks to rising consumer expenditure and the economy's recovery.
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Threats of Bosch:

- Multinational corporations and electronics companies.
 - New players in the market, increasing competition.
 - Sales decline due to expensive prices.
 - The car industry requires adjustments to fuel prices and outside influences.
 - Proficiency with automotive components.
 - Devices for the home or industry. The current supply chain paradigm, which is based on physical infrastructure, could face challenges from evolving consumer purchasing patterns via online platforms.
 - Because the competition offers local distributors higher margins, the growing influence of local distributors presents a challenge in certain industries.
 - A steady supply of novel items is lacking.
 - A increasing trend of isolationism in the American economy might lead to a comparable reaction from other nations, which would decrease sales abroad.
 - In the medium to long term, innovations created by rivals or market disruptors may pose a significant threat to the industry.
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CHAPTER-5

SUMMARY OF FINDINGS , SUGGESTION AND CONCLUSION

Findings:

- Bosch Company is known for its High Quality Products and Services.
- Bosch's market share reached some 21.1 percent in this year.
- Bosch Company is known for its CSR Activities and its responsibility towards environment.
- Bosch company sales of the product is increased year by year.
- Bosch Share Price has increased drastically over the years.
- Bosch export has also increased year by year.
- Bosch Software Company has provided Major source of employment to many youths.
- Bosch is one of the leading IT export company.
- Bosch has a good Foothold in the International Market.
- Bosch is has no loans it is debt free Company.
- Bosch has product in all ranges from average to medium and high range.
- Bosch is one of the largest employment provider in the country.
- Bosch has a good leadership and have a clear vision on their future Growth.

Suggestion:

- Bosch can improve upon their Customer Service.
 - Bosch can expand and try new products and try to reach new market.
 - Bosch can produce Components Hybrid automobile.
 - Bosch can get into renewable Sector.
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- Bosch can improve on their digital Marketing and can acquire more Customer through Internet Channel.
- Bosch has lot of competition in its sector it has to continuously innovate to be on the top.
- Bosch has to meet the changing demand of the market.
- Bosch present physical infrastructure-driven supply chain paradigm may be threatened by changing customer buying behaviour through Internet channels.

Conclusion:

Most likely, I gained knowledge on how to analyse financial statements and assess the financial stability of businesses. I learned more about market dynamics, competition, and developments in the industry the company works in. My ability to communicate and present has improved. Another ability I gained was time management, which allowed me to meet project deadlines. My project helped me develop personally and enabled me to apply theoretical knowledge to real-world scenarios. The significance of using classroom information and obtaining real-world experience was emphasized by this initiative.

Before coming to a judgement, I've learned to precisely identify the issue. This entails assembling all pertinent data and determining the various possibilities that are accessible. While producing the project report, I discovered that effective communication is crucial to success. I also learned how to approach the company by using my communication skills to get information. Along with learning how to input data into a project report, I also learned how to use artificial intelligence to create a short movie and prepare the company's financial statement, which helped me get better at typing. Time management is another thing I learned.
