



Working Capital Management and its Impact on Financial Performance: A Study of Wheels India Limited

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Abstract

Working capital management is a crucial aspect of financial management that ensures a company's liquidity, operational efficiency, and overall financial health. This study examines the working capital management of Wheels India Limited, one of India's leading two-wheeler manufacturers, focusing on its strategies for optimizing current assets and liabilities to maintain profitability and growth. Wheels India Limited effectively manages its cash flow, inventory, receivables, and payables to ensure smooth operations while minimizing financial risks. The company employs just-in-time (JIT) inventory management to reduce holding costs and optimize the production cycle. Additionally, it maintains a balanced approach to credit policies, ensuring timely receivables without straining customer relations. A detailed analysis of financial reports reveals how Wheels India Limited maintains a healthy working capital ratio, ensuring liquidity while leveraging short-term financing efficiently. The study also explores how the company navigates challenges such as fluctuations in demand, supply chain disruptions, and market competition. By implementing robust working capital management strategies, Wheels India Limited enhances its operational efficiency, reduces financial costs, and sustains profitability, reinforcing its position as a key player in the automotive industry. This research underscores the significance of efficient working capital management in sustaining long-term business success.

Keywords: Working Capital Management, Wheels India Limited, Liquidity Management, Operational Efficiency, Financial Health, Inventory Management

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CHAPTER -1

1.1 INTRODUCTION

Exploring the intricacies of working capital management is pivotal due to its fundamental significance in the realm of corporate finance and business operations. Effective management of working capital is crucial for ensuring the financial health, operational efficiency, and long-term sustainability of organizations across industries. This research paper aims to provide a comprehensive analysis of working capital management, with a specific focus on its implications for company performance and success. The rationale behind this topic lies in the recognition of working capital as a critical aspect of financial management that significantly influences a company's liquidity, profitability, and risk profile.

By investigating working capital management, this research seeks to shed light on the strategies, practices, and challenges associated with optimizing the balance between current assets and liabilities within an organization. Moreover, the selection of Wheels India Limited as a case study offers a practical and insightful perspective into the real-world application of working capital management principles within the automotive components sector. As a prominent player in this industry, Wheels India Limited presents an ideal opportunity to examine how working capital management strategies are tailored to address the unique dynamics and requirements of its business environment. Through this research paper, the aim is to explore various facets of working capital management, including inventory management, accounts receivable and payable management, cash flow optimization, and the use of financial ratios and metrics. By conducting a thorough analysis of Wheels India Limited's working capital practices, valuable insights can be extracted, best practices identified, and recommendations proposed to inform decision-making processes for practitioners, policymakers, and stakeholders alike. In essence, this research endeavor contributes to the existing body of knowledge on working capital management while offering actionable insights to empower organizations to enhance their financial performance, mitigate risks, and achieve sustainable growth in today's dynamic business landscape.

Working capital management stands as a cornerstone of financial strategy for companies across industries, serving as a vital determinant of their operational efficiency, financial health, and overall competitiveness. Within this realm, the automotive components industry presents a dynamic and complex landscape, characterized by evolving market dynamics, technological advancements, and stringent quality standards. Amidst these challenges and opportunities, Wheels India Limited emerges as a prominent player, renowned for its longstanding legacy of excellence, innovation, and customer-centric approach.

Established in 1960 as a flagship company of the esteemed , Wheels India Limited has cemented its position as a leading manufacturer of steel wheels for commercial vehicles, catering to a diverse range of markets spanning both domestic and international territories. The company's journey towards prominence has been underpinned by a relentless commitment to quality, innovation, and customer satisfaction, propelling it to the forefront of the automotive components industry. Working capital, comprising current assets and liabilities, forms the lifeblood of a company's day-to-day operations, enabling it to meet short-term financial obligations and fund ongoing business activities. For Wheels India Limited, optimizing working capital is not merely a financial exercise but a strategic imperative that underpins its ability to thrive in a fiercely competitive marketplace. In an industry characterized by rapid technological advancements and fluctuating demand patterns, the company's ability to effectively manage its working capital holds the key to unlocking operational excellence, mitigating financial risks, and seizing growth opportunities. By delving into the intricacies of working capital management within Wheels India Limited, this analysis seeks to unravel the strategies, practices, and performance drivers that underpin its financial operations. Through a comprehensive examination of key components such as inventory management, accounts receivable and payable optimization, cash flow forecasting, and sustainability integration, valuable insights can be unearthed that inform decision-making processes and drive sustainable growth in the automotive components industry.

Moreover, Wheels India Limited's commitment to corporate responsibility and sustainability adds another layer of complexity to the analysis of working capital

management. As businesses increasingly recognize the importance of environmental stewardship and social responsibility, understanding how Wheels India Limited integrates these principles into its financial decision-making processes offers valuable insights into the evolving role of finance in driving long-term value creation and stakeholder engagement. In essence, this analysis endeavors to provide a holistic understanding of working capital management within Wheels India Limited, shedding light on strategic imperatives, operational challenges, and performance drivers that shape its financial operations.

Through a nuanced exploration of the company's approach to managing working capital, actionable insights can be extracted that inform decision-making processes and drive sustainable growth in today's dynamic and interconnected Working capital management is a critical aspect of financial management for companies across industries, encompassing the management of current assets and liabilities to ensure efficient day-to-day operations and long-term financial stability.

It involves striking a delicate balance between liquidity and profitability, ensuring that a company has sufficient resources to meet its short-term obligations while maximizing returns on its assets. The significance of working capital management cannot be overstated, as it directly impacts a company's ability to fund its operations, pursue growth opportunities, and withstand financial shocks. In essence, it serves as the lifeblood of a company, enabling it to sustain its business activities and navigate through various economic cycles.

At its core, working capital management revolves around optimizing the levels of current assets such as cash, inventory, and accounts receivable, while also effectively managing current liabilities such as accounts payable and short-term debt. By efficiently managing these components, companies can enhance their liquidity position, minimize financing costs, and improve overall profitability. In practice, working capital management entails a range of strategic decisions and operational actions aimed at maintaining an optimal balance between inflows and outflows of cash and other liquid assets.

1.2 INDUSTRY PROFILE

AUTO COMPONENTS OF INDUSTRY IN INDIA

In today's modern world, a continuous and reliable power supply has become essential for residential, commercial, and industrial applications. However, power interruptions and fluctuations are still common in many parts of India, especially in rapidly growing urban areas. These issues can lead to inconvenience, productivity loss, and even damage to electrical equipment. To overcome such challenges, battery backup systems have become a crucial part of power systems, ensuring uninterrupted electricity supply during outages. Battery energy storage systems play a vital role in maintaining power stability and reliability. They store electrical energy and supply it when the main power source fails. With the increasing demand for uninterrupted power, the use of inverter and battery systems has significantly grown. Among the leading manufacturers in this sector is Amara Raja Energy & Mobility Limited, known for its high-quality and durable battery products marketed under the Amaron brand. The company provides a wide range of batteries suitable for residential, industrial, and solar applications.

This project focuses on the design and installation of a battery backup system using Amara Raja batteries for residential applications. The main objective is to analyze power requirements, select suitable battery capacity, and ensure efficient system performance. The study also includes load calculation, inverter selection, backup time estimation, and cost analysis. Proper installation techniques and safety measures are also considered to ensure reliable operation and long-term performance.

In addition, the project highlights the growing importance of integrating battery systems with renewable energy sources such as solar power. This combination not only provides backup during power cuts but also promotes sustainable energy usage. The increasing awareness of energy efficiency and environmental concerns has further boosted the adoption of such systems.

The battery and power backup systems industry plays a critical role in supporting modern infrastructure by ensuring uninterrupted power supply across residential, commercial, and industrial sectors. With the increasing dependence on electricity for daily activities and business operations, the demand for reliable energy storage

solutions has grown significantly. Power outages, voltage fluctuations, and rising energy consumption have made battery backup systems an essential component of power systems, particularly in developing countries like India.

The industry primarily includes the manufacturing and distribution of batteries such as lead-acid batteries, lithium-ion batteries, and advanced energy storage systems. Lead-acid batteries continue to dominate the Indian market due to their cost-effectiveness and widespread use in inverters and uninterruptible power supply (UPS) systems. However, lithium-ion batteries are gradually gaining popularity due to their higher efficiency, longer lifespan, and reduced maintenance requirements. The industry serves multiple applications, including home inverters, solar power systems, automotive batteries, telecom infrastructure, and data centers.

One of the major players in this industry is Amara Raja Energy & Mobility Limited, which is known for its strong presence in both automotive and industrial battery segments. Along with other key companies like Exide Industries Limited and Luminous Power Technologies, the company contributes significantly to the growth and innovation of the battery sector in India. These companies focus on product quality, technological advancement, and customer service to maintain their competitive edge in the market.

The growth of the battery industry is closely linked with the expansion of renewable energy, especially solar power. Government initiatives and policies promoting clean energy have accelerated the adoption of solar systems integrated with battery storage. This has created new opportunities for manufacturers, dealers, and installation service providers. Additionally, the rapid rise of electric vehicles (EVs) has further boosted the demand for advanced battery technologies, making the industry more dynamic and future-oriented.

Distribution and dealership networks form a vital part of the industry, ensuring that products reach end-users efficiently. Companies like Amara Raja operate through a wide network of authorized dealers and service centers across cities such as Chennai, enabling easy access to battery products and installation services. This network also supports after-sales service, which is crucial for maintaining customer satisfaction and long-term reliability.

Despite its growth, the industry faces challenges such as fluctuating raw material prices, environmental concerns related to battery disposal, and the need for continuous technological upgrades. Proper recycling and waste management practices are essential to minimize environmental impact. At the same time, ongoing

research and development efforts are focused on improving battery

efficiency, safety, and sustainability.

1.3 COMPANY PROFILE

POWER SYSTEM, Manufacturing, Servicing and Training provider to manufacturing and process industries offering end-to-end solutions with unmatched quality to help customers improve operational efficiency, shorten time-to-market and foster product innovation. Amara Raja Batteries Limited (ARBL) is the Indian storage battery industry's technology leader and one of the largest manufacturers of lead-acid batteries for industrial and automotive applications. ARBL's customers include Ford India, Honda, Hyundai, Mahindra & Mahindra, Maruti Suzuki, Ashok Leyland, and Tata Motors, as well as Honda Motorcycles & Scooters India Private Ltd, Royal Enfield, and Bajaj Auto Ltd. ARBL is a well-known private label supplier as well. The company is also home to brands such as Amaron and PowerZone and is also the leading manufacturer of batteries for home automotive batteries and UPS/inverters. Amaron, a well-known brand in India, is the largest brand that sells automotive batteries in India, while PowerZone offers a wide range of UPS/Inverter batteries. Through their innovative design, research, and technology, ARBL attained a leading position among battery manufacturers in India quickly. The ARBL group boasts revenue of INR 6800 Cr.

ARBL industrial battery division consists of the following brands: -

- * Power Stack
- * Amaron Volt™
- * Amaron Sleek™
- * Amaron Volt™ Amaron Brute™,
- * Amaron Quanta.

Amara Raja Batteries Limited (ARBL), the flagship company of the Amara Raja Group, is the technology leader and is one of the largest manufacturers of lead-acid batteries for both industrial and automotive applications in the Indian storage battery industry.

ARBL has prestigious original equipment manufacturers like Maruti Suzuki India Limited, Hyundai Motors India Limited, Ford India Limited, Tata Motors Limited, Mahindra and Mahindra Limited, Honda Cars India Limited, Renault Nissan, Honda Motorcycles & Scooters India Private Ltd, Royal Enfield, Bajaj Auto Ltd,

and many more as its clients. The Company's Industrial and Automotive batteries are exported to 32 countries across the globe.

In India, Amara Raja is the preferred supplier to major telecom service providers, Telecom equipment manufacturers, UPS sector (OEM & Replacement), Indian Railways and to Power, Oil & Gas among other industry segments.

VISION AND MISSION

VISION

vision 2025: Through the Amara Raja Way, we will be a Rs. 60,000 Cr Group, redefining businesses and Delivering High Social Impact, by Anticipating Future Trends, Building Preferred Brands and Leveraging Talent & Technology.

Values:

- * Innovation
- * Excellence
- * Entrepreneurship
- * Experiences

Amara Raja Batteries Culture at a Glance:

1 employee at Amara Raja Batteries has reviewed Amara Raja Batteries across various culture dimensions, providing their opinions on items ranging from executive ratings to the pace at work. The latest review was months ago.

MISSION

To transform our increasing spheres of influence and to improve the quality of life by building institutions that provide better access to better opportunities to more people. . . all the time.

1.4 OBJECTIVES OF THE STUDY

The main objective of this study is to understand the design, installation, and performance of battery-based power backup systems in real-time applications. The project mainly focuses on systems using batteries from Amara Raja Energy & Mobility Limited and aims to provide both technical and practical knowledge related to power systems.

Primary Objectives:

To study the importance of battery backup systems in ensuring uninterrupted power supply.

To analyze the power requirements of residential or small commercial applications.

To select a suitable battery capacity and inverter based on load requirements. To understand the working principles of inverter and battery systems.

To design an efficient battery backup system using appropriate components.

Technical Objectives:

To perform load calculation for different electrical appliances. To estimate battery backup time based on capacity and usage. To study installation procedures and wiring connections.

To identify safety measures during battery installation and operation. To evaluate system performance and efficiency.

Economic Objectives:

To estimate the total cost of battery and inverter installation. To analyze maintenance and operational costs.

To understand the return on investment (ROI) of battery systems.

1.5 NEED OF STUDIES

In the present day, electricity is a fundamental requirement for residential,

commercial, and small business activities. However, frequent power cuts,

voltage fluctuations, and increasing energy demand create significant challenges in maintaining a continuous and reliable power supply. In rapidly developing urban areas like Chennai, the dependency on electrical appliances such as lighting, fans, computers, and other essential equipment makes power interruptions a major concern.

Despite the availability of power backup solutions, many users face difficulties in selecting suitable battery systems due to lack of technical knowledge and proper guidance. Incorrect selection of battery capacity, inverter rating, and poor installation practices often result in reduced efficiency, insufficient backup time, and increased maintenance costs. This creates a gap between the availability of technology and its effective utilization.

Additionally, there is limited awareness regarding the design and installation of efficient battery backup systems using reliable products from companies like Amara Raja Energy & Mobility Limited. Many users are not aware of how to calculate their actual power requirements or how to choose the right system based on their needs. As a result, they either invest in oversized systems, leading to unnecessary expenses, or undersized systems, resulting in poor performance.

Another major problem is the lack of integration between battery systems and renewable energy sources such as solar power. Although such integration can improve energy efficiency and reduce electricity costs, it is not widely adopted due to lack of awareness and technical expertise.

1.6 SCOPE OF THE STUDY

This study covers the process of calculating electrical load requirements for various appliances such as lights, fans, televisions, and computers. Based on these calculations, suitable battery capacity and inverter ratings are selected to meet the required backup time. The scope also includes understanding the working principles of batteries and inverters, along with their performance under different load conditions. It provides practical knowledge on how to design an efficient and reliable backup system.

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meet the required backup time. The scope also includes understanding the working principles of batteries and inverters, along with their performance under different load conditions. It provides practical knowledge on how to design an efficient and reliable backup system.

In addition, the study includes the installation procedures of battery systems, such as wiring connections, inverter setup, and safety precautions. Proper installation is essential to ensure system efficiency, durability, and user safety. The study also examines important safety measures to prevent hazards such as short circuits, overheating, and improper handling of batteries.

Another important area covered in this study is cost analysis. It includes estimating the total investment required for battery and inverter systems, along with maintenance costs and operational expenses. This helps in understanding the economic feasibility and long-term benefits of installing such systems. The study also evaluates the performance and efficiency of the system, which is useful for making improvements and ensuring optimal utilization.

1.7 LIMITATIONS OF THE STUDY

limitation of this study is the limited consideration of different battery technologies. While the focus is mainly on conventional lead-acid batteries provided by Amara Raja Energy & Mobility Limited, newer technologies such as lithium-ion batteries are not analyzed in depth. These advanced batteries offer higher efficiency, longer lifespan, and faster charging, but due to cost and availability constraints, they are not included in detailed comparison within this study. The study also does not include extensive field testing under varying real-time conditions. Practical performance of battery systems can differ based on factors such as load variations, usage patterns, and unexpected power failures. Since the project is mainly based on theoretical calculations and limited practical exposure, the results may not fully reflect real-world performance in all situations. In addition, customer behavior and user handling practices are not deeply analyzed. Improper usage, lack of maintenance, and incorrect installation by users can significantly affect the performance and lifespan of battery systems. These human factors are difficult to measure and are beyond the scope of this study, but they play an important role in real-life applications. Another constraint is related to financial analysis, as market

prices of batteries, inverters, and

installation services may fluctuate over time. The cost estimation provided in this study is based on current market conditions and may vary depending on location, dealer pricing, and economic factors. Therefore, the financial conclusions drawn may not remain constant in the future.

Lastly, regulatory policies and government guidelines related to power systems, battery disposal, and environmental safety are not covered in detail.

These regulations can influence the installation and operation of battery systems. A more detailed study including legal and environmental aspects would provide a broader understanding but is beyond the present scope.



Company Logo

CHAPTER 2

REVIEW OF LITERATURE

2.1 INTRODUCTION

The review of literature is an important part of any study, as it provides a detailed understanding of existing research, theories, and practical approaches related to the topic. In the context of battery-based power backup systems, the literature review helps to analyze previous studies on energy storage technologies, inverter systems, and power management solutions. It also With the increasing demand for uninterrupted power supply, several researchers and industry experts have focused on developing efficient and reliable battery systems. The growth of the power backup industry has been influenced by rapid urbanization, increased electricity consumption, and frequent power interruptions. In countries like India, the need for effective power backup solutions has led to continuous improvements in battery technologies and system design.

2.2 REVIEW OF LITERATURE

Several studies have been conducted on battery backup systems and their role in ensuring reliable power supply. Early research mainly focused on lead-acid batteries due to their low cost and widespread availability. These studies highlighted the importance of proper maintenance, charging cycles, and operating conditions in improving battery life and efficiency. Recent studies have explored the performance comparison between lead-acid and lithium-ion batteries. Lithium-ion batteries are found to be more efficient, with higher energy density and longer lifespan. However, due to higher initial costs, lead-acid batteries continue to dominate the market, especially in developing regions.

Research on inverter technology has also contributed significantly to improving power backup systems. Modern inverters are designed to provide better efficiency, faster switching, and improved safety features. Studies show that selecting the right inverter based on load requirements is crucial for optimizing system performance.

In addition, several researchers have emphasized the integration of battery systems with renewable energy sources such as solar power. Solar-battery

hybrid systems are gaining popularity as they provide both energy savings and backup power. These systems reduce dependency on conventional electricity and support sustainable energy practices. Industry reports and case studies from companies like Amara Raja Energy & Mobility Limited highlight the importance of innovation, product quality, and customer service in the battery sector. The company's focus on advanced manufacturing and reliable products has contributed to the growth of the power backup market.

Several researchers have emphasized the importance of energy storage systems in improving power reliability. Studies show that battery backup systems act as a bridge between power generation and consumption, especially during peak demand and power outages. These systems help maintain voltage stability and reduce dependency on continuous grid supply. Research has also highlighted the role of battery management systems (BMS) in enhancing battery performance. A BMS monitors battery health, controls charging and discharging cycles, and ensures safety during operation. Proper battery management increases efficiency and extends battery life, which is essential for both residential and commercial applications. Many studies focus on the economic benefits of battery backup systems. It is found that although the initial investment may be high, long-term benefits such as reduced downtime, lower maintenance costs, and improved productivity make these systems cost-effective. This is especially important for small businesses and offices that depend heavily on continuous power supply.

In recent years, researchers have explored the environmental impact of battery usage. Improper disposal of batteries can lead to environmental pollution due to hazardous materials. Therefore, studies suggest the importance of recycling and proper waste management practices. Companies like Amara Raja Energy & Mobility Limited have taken initiatives towards sustainable manufacturing and recycling processes.

Another area of research is the integration of smart technologies with power systems. Smart inverters and IoT-based monitoring systems allow users to track power usage, battery status, and efficiency in real time. These technologies improve system performance and help in preventive maintenance.

Literature also highlights the growing demand for hybrid power systems that combine solar energy with battery storage. These systems are widely used in areas

with frequent power cuts and high electricity costs. Studies show that solar-

battery systems reduce electricity bills and promote the use of renewable energy.

It has been observed that extreme temperatures, especially high heat, can significantly reduce battery life and efficiency. Proper ventilation and controlled environments are therefore recommended to ensure optimal functioning of battery backup systems.

Researchers have also analyzed the economic aspects of power backup systems. Cost-benefit analysis indicates that while initial investment may be high for advanced systems, long-term savings can be achieved through reduced maintenance costs, improved efficiency, and lower electricity bills. This makes modern backup solutions more attractive for both residential and commercial users.

Finally, advancements in energy storage technologies, such as solid-state batteries and hybrid storage systems, are being explored to overcome the limitations of existing battery types. These emerging technologies promise higher efficiency, improved safety, and longer lifespan, indicating a strong future potential for the power backup industry.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

Research design is an essential component of any study, as it provides the overall structure and strategy for collecting, measuring, and analyzing data. It acts as a blueprint that guides the researcher in conducting the study systematically and efficiently. In this project, the research design has been carefully selected to suit the objectives of analyzing the accounting practices followed at Power System, Egmore. The present study adopts a descriptive research design, which is one of the most commonly used designs in business and management studies. Descriptive research focuses on describing the characteristics of a particular phenomenon or situation. In this case, the study aims to describe how accounting activities are carried out within the organization, including the maintenance of financial records, preparation of statements, and handling of transactions.

The choice of descriptive research design is appropriate because the study does not attempt to manipulate any variables or test a specific hypothesis under controlled conditions. Instead, it seeks to observe and understand the existing practices within the company. This approach helps in gaining a realistic view of the accounting system as it operates in a natural work environment.

The research design also incorporates both qualitative and quantitative methods. The qualitative aspect involves understanding the processes, procedures, and workflows followed in the accounts department. This includes observing how transactions are recorded, how financial data is organized, and how reports are generated. It also involves informal discussions with

3.2 SAMPLING METHODS

Sampling is a crucial aspect of research methodology, as it determines how data is selected from a larger population for the purpose of analysis. In any organizational study, it is often impractical to analyze the entire population due to time constraints, accessibility issues, and resource limitations. Therefore, an appropriate sampling method is essential to ensure that the selected data accurately represents the overall population and contributes to meaningful

findings.

In the present study, which focuses on analyzing accounting practices at Power System, Egmore, a non-probability sampling method has been adopted. Specifically, the study uses convenience sampling, which involves selecting data that is readily available and accessible to the researcher during the internship period. This method is particularly suitable in situations where the researcher has limited time and access to data, as is the case in most internship-based projects.

Convenience sampling was chosen primarily due to the practical nature of the study. During the internship, access to financial records was limited to specific documents and time periods. The researcher relied on the available accounting data, including invoices, expense records, and financial statements, which were accessible with the permission of the organization. This method allowed for efficient data collection without disrupting the normal functioning of the accounts department.

Another reason for selecting convenience sampling is that the study aims to understand general accounting practices rather than to generalize findings across multiple organizations. Since the focus is on a single company, the need for complex probability sampling techniques is reduced. The available data itself provides sufficient insight into the financial operations and accounting procedures followed within the organization.

The samples selected for this study include various types of financial data such as purchase bills, sales invoices, daily expense records, and summary financial statements. These records provide a comprehensive view of the company's financial activities and allow for effective analysis using statistical tools. Care has been taken to ensure that the selected samples cover different time periods and categories of transactions, thereby improving the reliability of the analysis.

3.3 SAMPLING SIZE

Sampling size refers to the number of observations or data points selected from

the total population for the purpose of analysis. Determining an appropriate sample size is essential in ensuring the reliability and accuracy of research findings. A well-chosen sample size helps in capturing the characteristics of the population while maintaining feasibility in terms of time and resources.

In this study, the sample size has been determined based on the availability of financial data during the internship at Power System, Egmore. Since the study is based on real-time organizational data, the sample size is influenced by the accessibility of records and the duration of the internship. Approximately 50 to 100 financial records have been considered for analysis, including various types of transactions such as income entries, expense records, and billing details.

The selected sample size is considered adequate for the purpose of this study, as it provides a balanced representation of the company's financial activities. The data includes transactions from different time periods and categories, allowing for a comprehensive analysis of financial patterns. By including a variety of records, the study ensures that the findings are not limited to a specific type of transaction or a short time frame.

One of the key factors influencing the sample size is the scope of the study. Since the project focuses on understanding accounting practices within a single organization, a moderate sample size is sufficient to achieve the research objectives. The emphasis is on analyzing the quality and nature of financial data rather than on large-scale statistical generalization.

The sample size also supports the application of statistical tools such as percentage analysis, mean, standard deviation, and chi-square tests. These tools require numerical data, and the selected sample size provides enough observations to perform meaningful calculations and interpretations. For instance, analyzing monthly income and expense data across multiple entries helps in identifying trends and variations in financial performance.

3.4 SAMPLING DESIGN

Sampling design refers to the overall plan or framework used to select samples from a population. It defines the structure and method by which data is collected, organized, and analyzed. A well-defined sampling design ensures that the selected data is relevant, representative, and suitable for achieving the objectives of the study.

In this project, the sampling design has been structured in a way that aligns with the objectives of analyzing accounting practices at Power System, Egmore. The design is based on a non-probability sampling approach, where data is selected based on accessibility and relevance rather than random selection. This approach is suitable for internship-based studies where data availability is limited.

The sampling design involves categorizing financial data into different segments to facilitate systematic analysis. The primary categories considered in this study include income, expenses, and overall financial transactions. By organizing data into these categories, the researcher is able to analyze each component separately and gain a deeper understanding of the company's financial structure.

Further classification is done based on time periods, such as daily, weekly, or monthly transactions. This time-based categorization helps in identifying trends and patterns in financial performance. For example, analyzing monthly expense data can reveal fluctuations in operational costs, while income data can indicate revenue growth or decline over time.

3.5 SOURCE OF DATA

Data collection is a fundamental aspect of any research study, as the quality and reliability of the findings largely depend on the nature and accuracy of the data used. In this project, which focuses on analyzing the accounting practices at Power System, Egmore, both primary and secondary data sources have been utilized. The combination of these two sources ensures a comprehensive and well-rounded understanding of the organization's financial operations.

Primary Data

Primary data refers to the information that is collected directly by the researcher for the specific purpose of the study. In this project, primary data was gathered during the internship period through direct observation and interaction within the

accounts department.

One of the main methods of collecting primary data was observation. The researcher closely observed the day-to-day accounting activities carried out in the organization. This included recording financial transactions, preparing invoices, maintaining ledgers, and handling cash or digital payments. Observation provided real-time insights into how accounting concepts are applied in a practical business environment.

Secondary Data

Secondary data refers to information that has already been collected and recorded by the organization for its own purposes. In this study, secondary data plays a significant role, as it provides the numerical foundation required for financial analysis.

The primary sources of secondary data include:

- * Financial statements such as income statements and expense reports
- * Invoices and bills related to purchases and sales
- * Ledger records maintained by the accounts department
- * Internal reports prepared by the company

These records were used to analyze financial performance and apply statistical tools. The availability of structured financial data made it possible to conduct detailed analysis and draw meaningful conclusions.

Secondary data is highly valuable because it reflects the actual financial activities of the organization. It provides accurate numerical data that can be used for calculations and comparisons. However, access to certain confidential data may be restricted, which can limit the scope of analysis.

3.6 TOOLS USED FOR THE STUDY

Statistical tools play a vital role in analyzing and interpreting financial data in a

meaningful way. In this study, various statistical techniques have been applied to

evaluate the accounting data collected during the internship. These tools help in simplifying complex numerical data, identifying patterns, and drawing logical conclusions.

1. Percentage Analysis

Percentage analysis is one of the simplest and most commonly used tools in financial analysis. It helps in expressing data in percentage form, making it easier to compare different values.

$$\text{Percentage} = \left(\frac{\text{Value}}{\text{Total}} \right) \times 100$$

Percentage analysis is used in this study to:

- * Compare income and expenses
- * Analyze cost distribution
- * Understand financial proportions

For example, the percentage of total expenses spent on different categories such as rent, salaries, and utilities can be calculated using this method.

2. Mean (Arithmetic Average)

Mean is a measure of central tendency that represents the average value of a dataset. It is widely used in financial analysis to determine the typical value of a set of observations.

$$\bar{x} = \frac{\sum x}{n}$$

Where:

- * \bar{x} = Mean
- * $\sum x$ = Sum of all observations
- * n = Number of observations

In this study, mean is used to:

- * Calculate average income
- * Determine average expenses
- * Analyze financial consistency

The mean provides a simple summary of large data sets and helps in understanding overall trends.

3. Standard Deviation

Standard deviation is a statistical tool used to measure the variability or dispersion of a dataset. It indicates how much the values deviate from the mean.

$$\sigma = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$$

Where:

- * σ = Standard deviation
- * x = Individual values
- * \bar{x} = Mean
- * n = Number of observations

In this study, standard deviation is used to:

- * Measure fluctuations in income and expenses
- * Identify consistency in financial data
- * Analyze risk and variability

A low standard deviation indicates stability, while a high value shows greater variation.

4. Chi-Square Test

The Chi-square test is a statistical method used to determine whether there is a significant relationship between two variables.

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where:

- * O = Observed frequency
- * E = Expected frequency

In this study, the Chi-square test is used to:

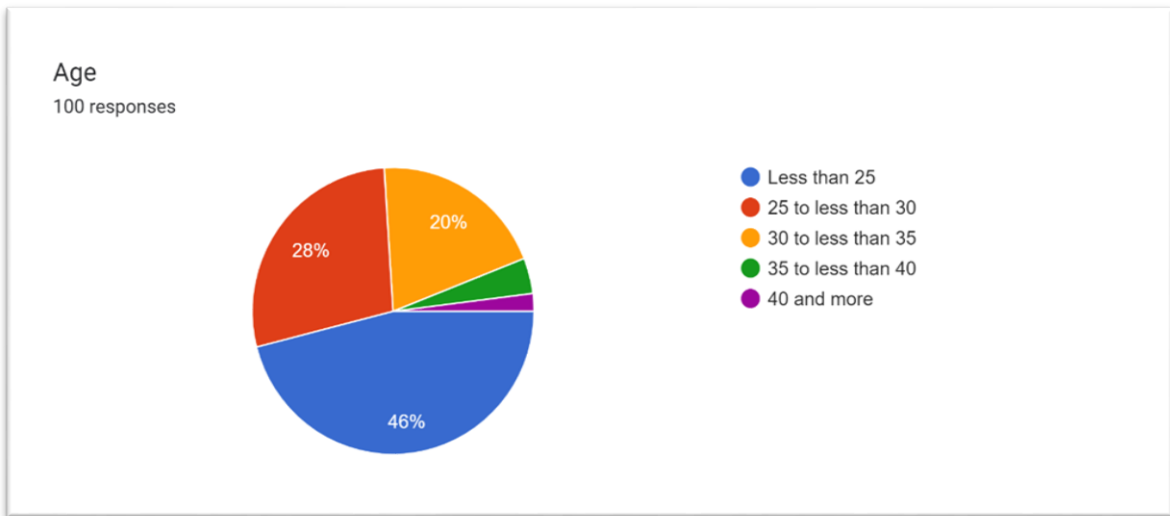
- * Analyze relationships between variables
- * Test hypotheses related to financial data
- * Identify patterns in categorical data

CHAPTER 4

Data Analysis and Results

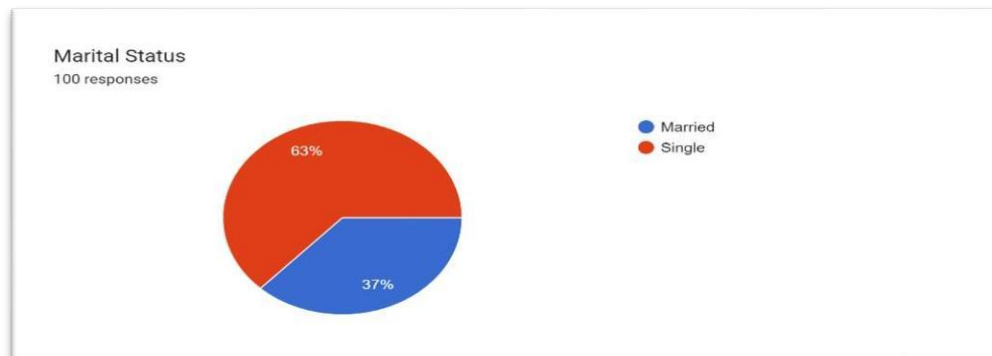
AGE OF RESPONDENTS

Age	Frequency		Percentage	
Less than 25		46		46%
25 to less than 30		28		28%
30 to less than 35		20		20%
35 to less than 40		4		4%
40 and more		2		2%
Total		100		100%



INFERENCE: Majority of people are from age group of 25 to 30

MARTIAL STATUS OF RESPONDENT

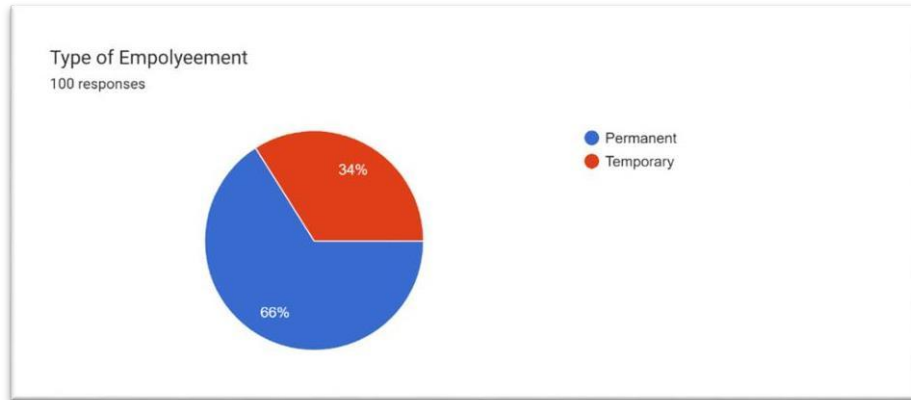


Marital Status	Count	Percentage
Married	37	37%
Single	63	63%
Total	100	100%

INFERENCE: Majority of people are single

Type of Employment Of RESPONDENT

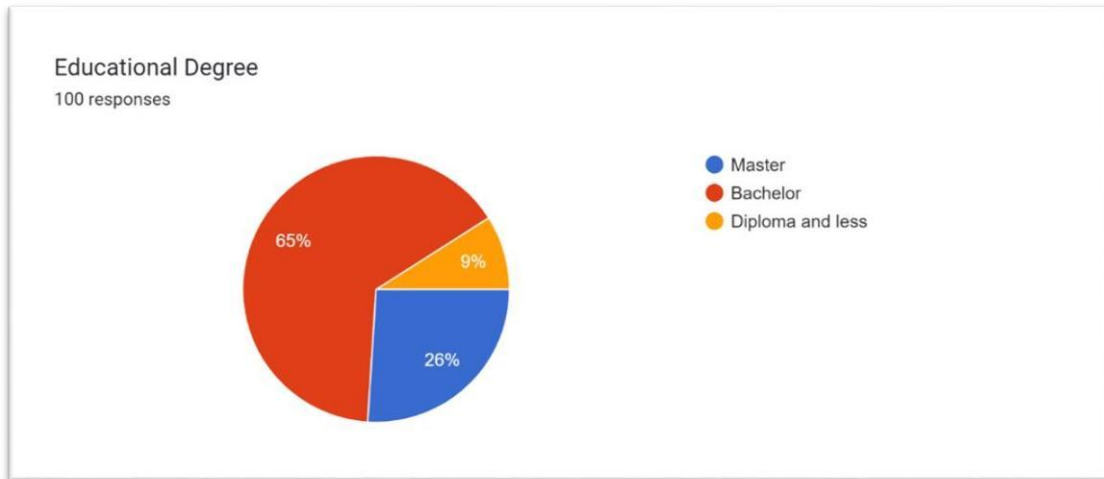
Type of	Coun	Percentag
Permanen	66	66%
t	34	34%
Temporar	100	100%
y Total		



INFERENCE: 66% of people are permanent employees

Educational Degree Of RESPONDENT

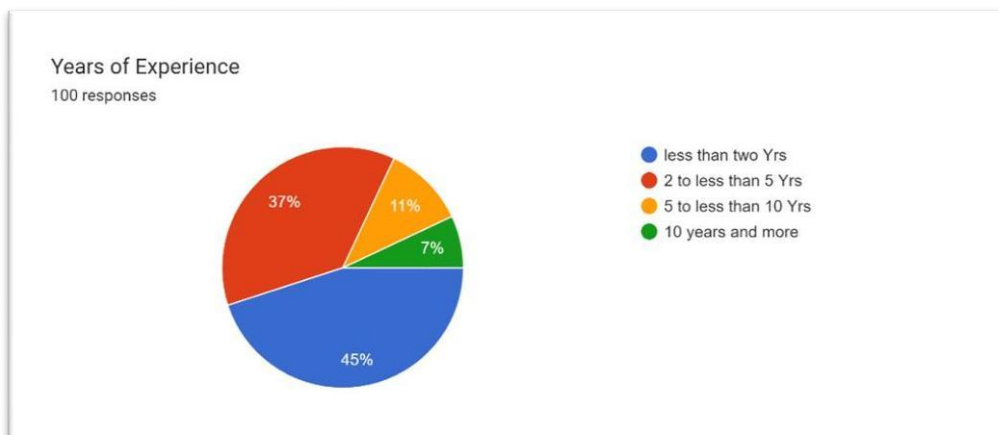
Educational Degree	Count	Percentage
Master	26	26%
Bachelor	65	65%
Diploma and less	9	9%
Total	100	100%



INFERENCE: 65% of people are bachelor degree holders

Years of Experience Of RESPONDENT

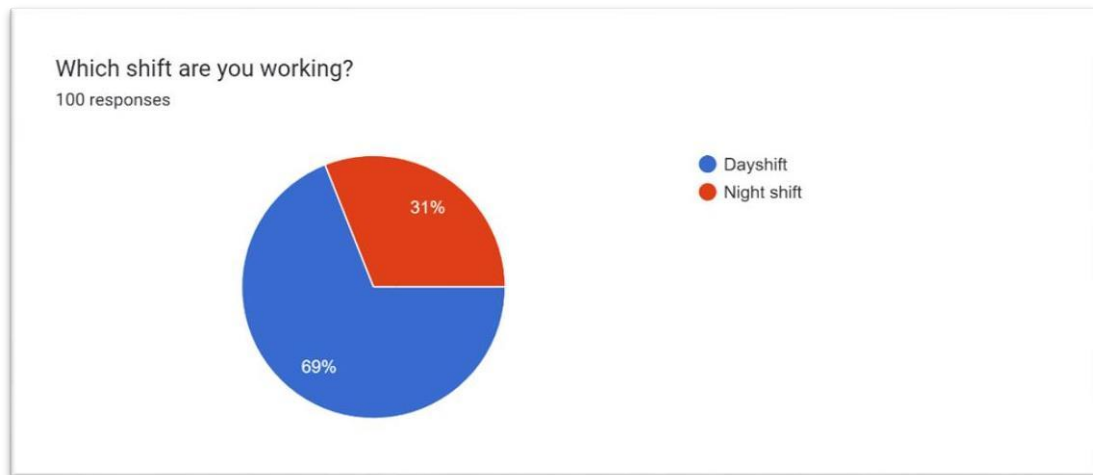
Years of Experience	Count	Percentage
less than two Yrs	45	45%
2 to less than 5 Yrs	37	37%
5 to less than 10 Yrs	11	11%
10 years and more	7	7%
Total	100	100%



INFERENCE: Majority of people have experience lesser than 2 years

Which shift are you working Of RESPONDENT

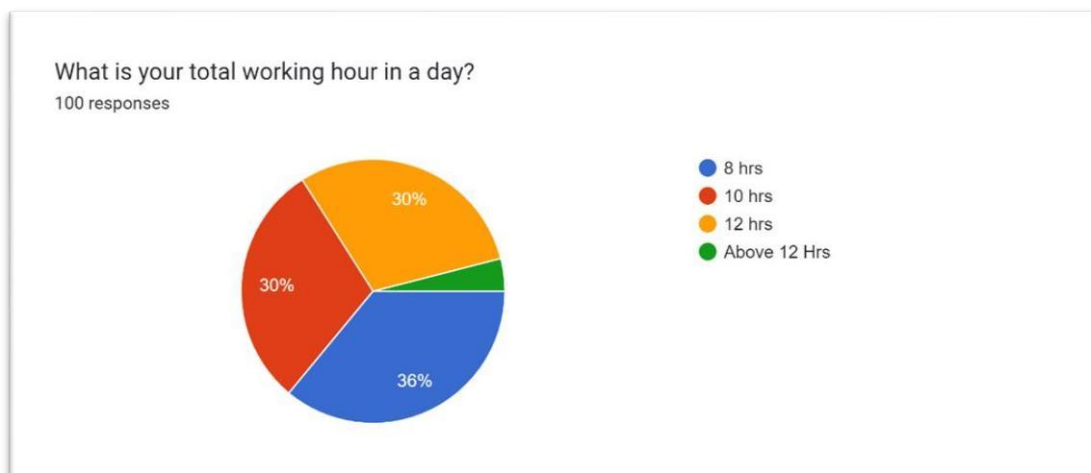
Which shift are you working? Count	Percentage	
Dayshift	69	69%
Night shift	31	31%
Total	100	100%



INFERENCE: Majority of people working in day shift

What is your total working hour in a day Of RESPONDENT

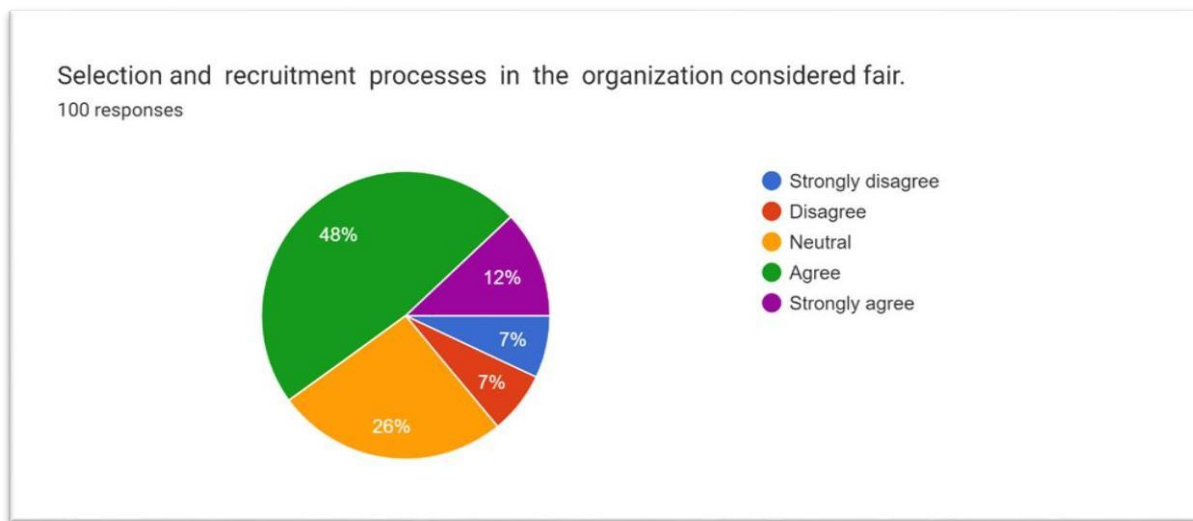
What is your total working hour in a day?	Count	Percentage	
8 hrs	36		36%
10 hrs	30		30%
12 hrs	30		30%
Above 12 Hrs	4		4%
Total	100		100%



INFERENCE: Majority of people working 8 hours per day

Selection and recruitment processes in the organization considered fair Of RESPONDENT

Selection and recruitment processes in the organization considered fair.	Count	Percentage
Strongly disagree	7	7%
Disagree	7	7%
Neutral	26	26%
Agree	48	48%
Strongly agree	12	12%
Total	100	100%

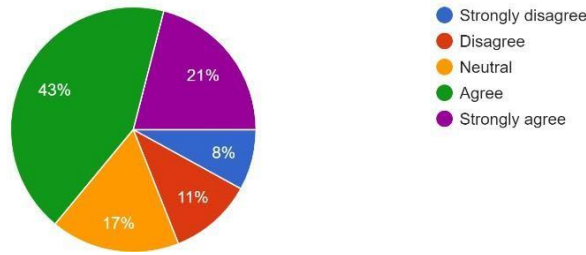


INFERENCE: Majority of people agreed in selection and recruitment process are fair.

The organization provides employee with training opportunities that increase his abilities and skills Of RESPONDENT

The organization provides employee with training opportunities that increase his abilities and skills	Count	Percentage
Strongly disagree	8	8%
Disagree	11	11%
Neutral	17	17%
Agree	43	43%
Strongly agree	21	21%
Total	100	100%

The organization provides employee with training opportunities that increase his abilities and skills
 100 responses

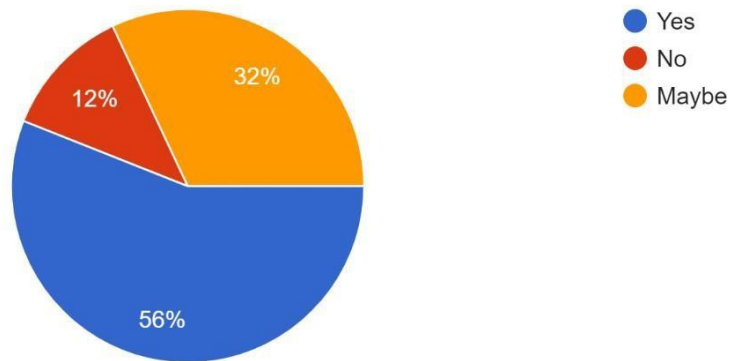


INFERENCE: 43% of people agreed that organization provides employee with training opportunities that increases his skills

Employee’s Training needs are discussed with the manager Of RESPONDENT

Employee’s Training needs are Discussed with the manager		
	Count	Percentage
Yes	56	56%
No	12	12%
Maybe	32	32%
Total	100	100%

Employee’s Training needs are discussed with the manager
 100 responses

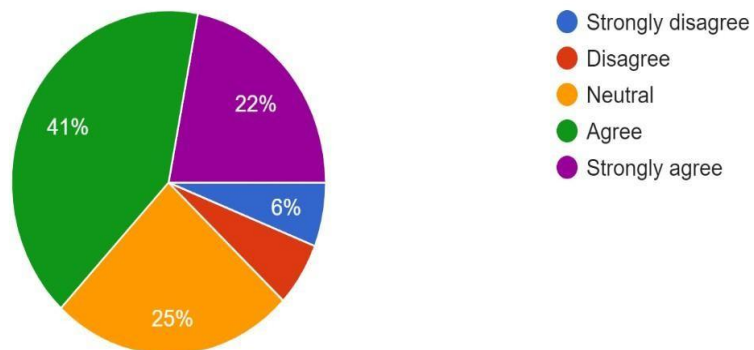


INFERENCE: From the above table we can conclude that employees training needs are discussed with manager

Organization depends of attracting distinguished qualified and expertise trainers to train employees Of RESPONDENT

Organization depends of attracting distinguished qualified and expertise trainers to train employees	Count	Percentage
Strongly disagree	6	6%
Disagree	6	6%
Neutral	25	25%
Agree	41	41%
Strongly agree	22	22%
Total	100	100%

Organization depends of attracting distinguished qualified and expertise trainers to train employees
 100 responses

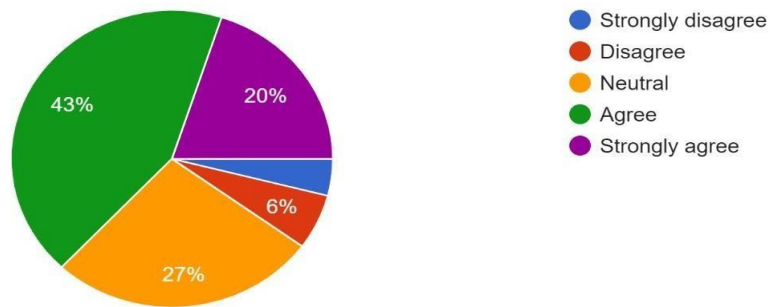


INFERENCE: Majority of the people agrees performance appraisal system identifies the swot analysis of employees

Performance appraisal system identifies the strengths and weaknesses of the employees Of RESPONDENT

Performance appraisal system identifies the strengths and weaknesses of the employees				
	Count	Percentage		
Strongly disagree		4		4%
Disagree		6		6%
Neutral		27		27%
Agree		27		27%
Strongly agree		27		27%
Total		100		100%

Performance appraisal system identifies the strengths and weaknesses of the employees
 100 responses



INFERENCE: Majority of people agreed that organization depends on attracting qualified trainers to train employees

Managers seeks to strengthen and expand relations with employees Of RESPONDENT

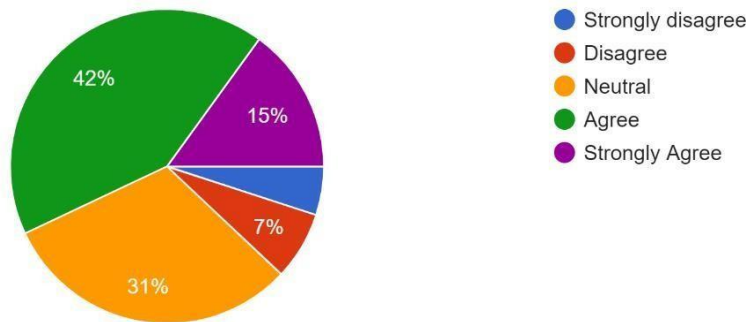
Managers seeks to strengthen and expand relations with employees

	Count	Percentage		
Strongly disagree		5		5%
Disagree		7		7%
Neutral		31		31%
Agree		42		42%

Strongly Agree		15		15 %
Total		100		100 %

Managers seeks to strengthen and expand relations with employees

100 responses



INFERENCE: Majority of people agreed that manager seeks to strengthen and expand relations with employees

The manager talks continuously with employees about work problems and obstacles Of RESPONDENT

The manager talks continuously with employees about work problems and obstacles

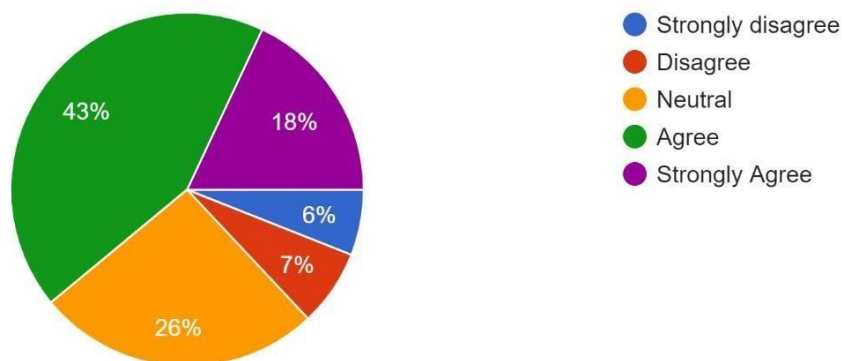
Coun

Percentag

Strongly disagree		6	6%
Disagree		7	7%
Neutral		26	26%
Agree		43	43%
Strongly Agree		18	18%
Total		100	100%

The manager talks continuously with employees about work problems and obstacles

100 responses

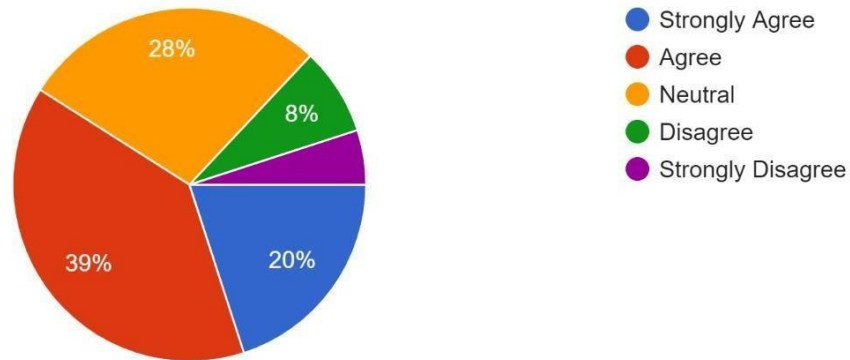


INFERENCE: Majority of people agreed that manager talks continuously with employees about work related issues

The manager can deliver clear messages to employees about matters relating to work Of RESPONDENT

The manager can deliver clear messages to				
employees about matters relating	to work	Count		Percentage
Strongly Agree		20		20%
Agree		39		39%
Neutral		28		28%
Disagree		8		8%
Strongly Disagree		5		5%
Total		100		100%

The manager can deliver clear messages to employees about matters relating to work
100 responses

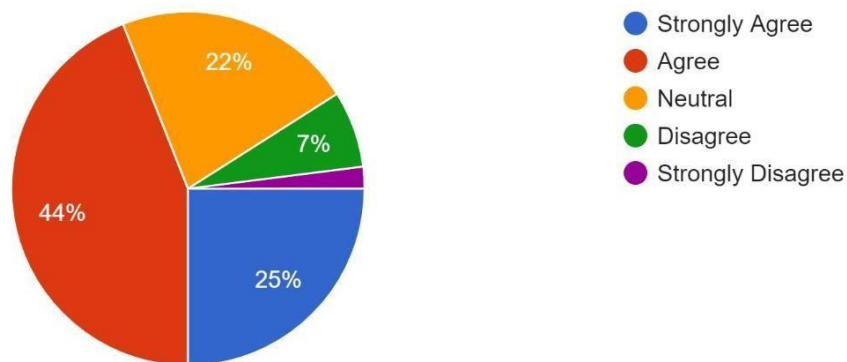


INFERENCE: Majority of people agreed that manager can deliver clear messages to employees

The manager uses various communication methods to clarify his ideas Of RESPONDENT

The manager uses various communication methods to clarify his ideas				
methods to clarify his ideas	Count		Percentage	
Strongly Agree		25		25%
Agree		44		44%
Neutral		22		22%
Disagree		7		7%
Strongly Disagree		2		2%
Total		100		100%

The manager use various communication methods to clarify his ideas
 100 responses

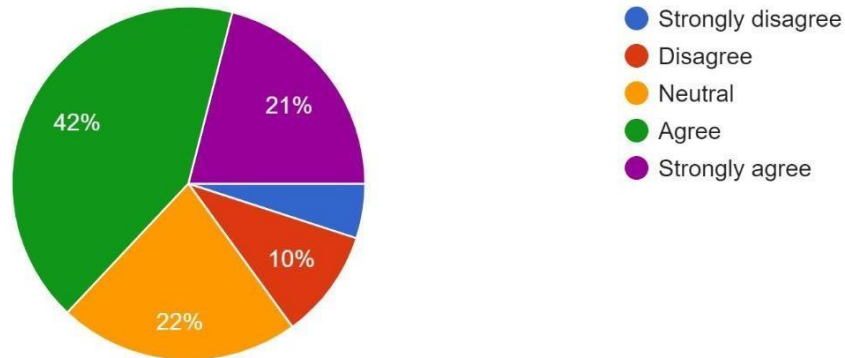


INFERENCE: From the above information we can say that Manager uses various communication to clarify his ideas

The manager conducts regular meetings to discuss the employee's achievements Of RESPONDENT

The manager conducts regular meetings to discuss the employee's achievements		
	Count	Percentage
Strongly disagree	2	2%
Disagree	10	10%
Neutral	22	22%
Agree	42	42%
Strongly agree	21	21%
Total	100	100%

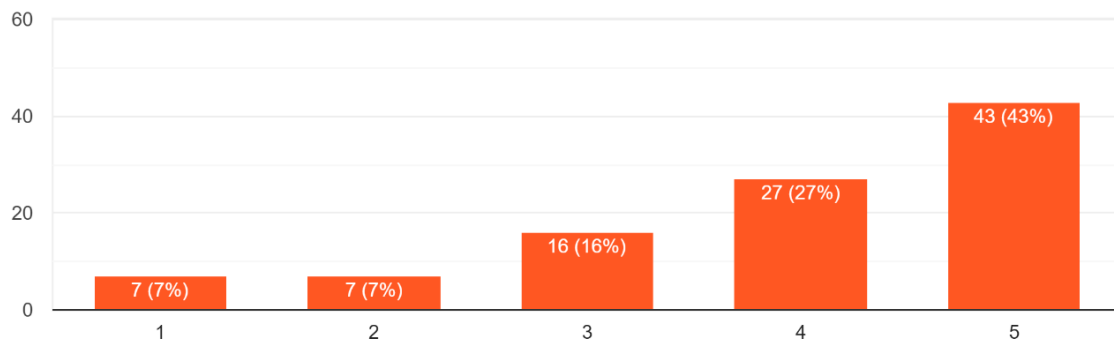
The manager conduct regular meetings to discuss the employees achievements
 100 responses



INFERENCE: Majority of people agreed that manager conduct regular meetings to discuss employee achievements

Written information is provided to employees in an easy manner to understand Of RESPONDENT

Option		Count		Percentage	
	1		7		7%
	2		7		7%
	3		16		16%
	4		27		27%
	5		43		43%
Total			100		100%
Written information are provided to employees in an easy manner to understand					
100 responses					

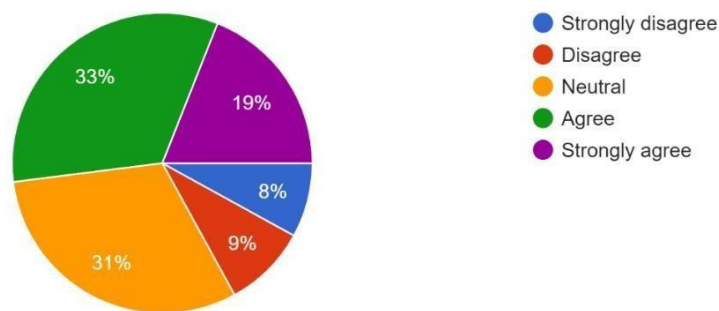


INFERENCE: 43% of people said that written information is provided to employees is easy to understand

The organization treats employees fairly and without discrimination Of RESPONDENT

The organization treats employees fairly and without discrimination		Count	Percentage
Strongly disagree		8	8%
Disagree		9	9%
Neutral		31	31%
Agree		33	33%
Strongly agree		19	19%
Total		100	100%

The organization treats employees fairly and without discrimination
 100 responses

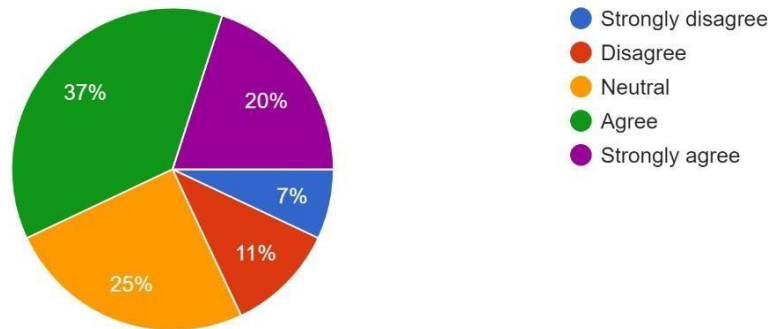


INFERENCE: Majority of people agreed that employees trust promises provided by managers

The Employees trust the promises provided by managers Of RESPONDENT

The Employees trust the promises provided by managers	Count	Percentage
Strongly disagree	7	7%
Disagree	11	11%
Neutral	25	25%
Agree	37	37%
Strongly agree	20	20%
Total	100	100%

The Employees trust the promises provided by managers
 100 responses

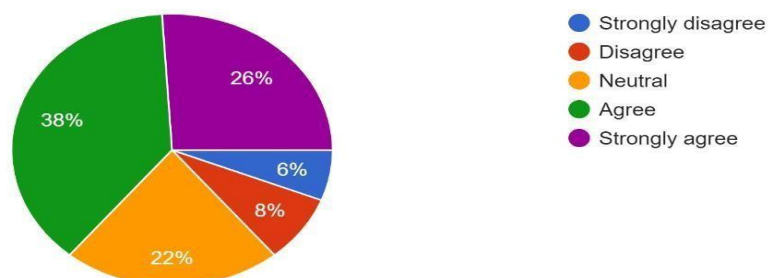


INFERENCE: Majority of people agreed that managers takes opinion of employees into account when making decisions

Managers takes the opinions of employees into account when making decisions Of RESPONDENT

Managers takes the opinions of employees into account when making decisions	Count	Percentage
Strongly disagree	6	6%
Disagree	8	8%
Neutral	22	22%
Agree	38	38%
Strongly agree	26	26%
Total	100	100%

Managers takes the opinions of employees into account when making decisions
 100 responses

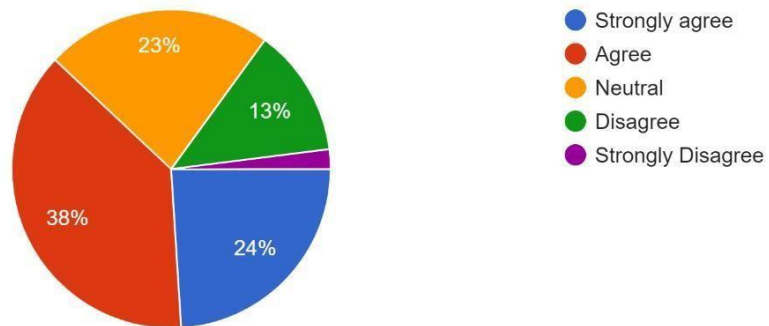


INFERENCE: Majority of people agreed that managers are successful in the work they attempt to accomplish

Managers are successful in the work they attempt to accomplish Of RESPONDENT

Managers are successful in the work they attempt to accomplish			Percent age
	Count		
Strongly agree		24	24 %
Agree		38	38 %
Neutral		23	23 %
Disagree		13	13 %
Strongly Disagree		2	2 %
Total		100	100 %

Managers are successful in the work they attempt to accomplish
 100 responses



INFERENCE: Majority of employees trust the decision taken by managers

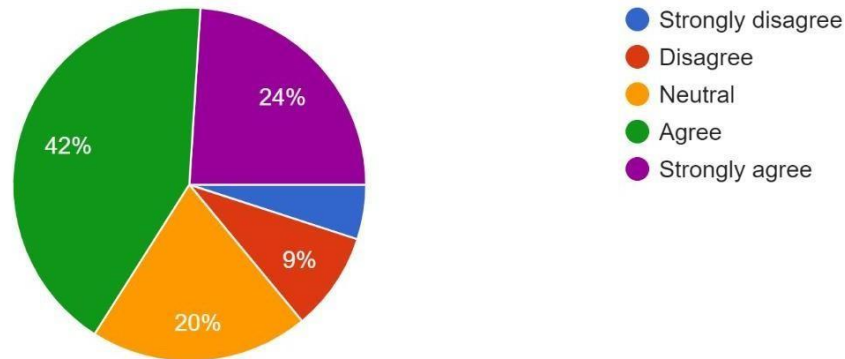
The employees feel very confident about their manager skills and abilities Of RESPONDENT

The employees feel very confident about their manager skills and abilities	Count	Percentage
Strongly disagree	5	5%

Disagree		9	9%
Neutral		20	20%
Agree		42	42%
Strongly agree		24	24%
Total		100	100%

The employees feel very confident about their manager skills and abilities

100 responses



INFERENCE: Majority of people agreed that the employees feel very confident about their manager skills and abilities

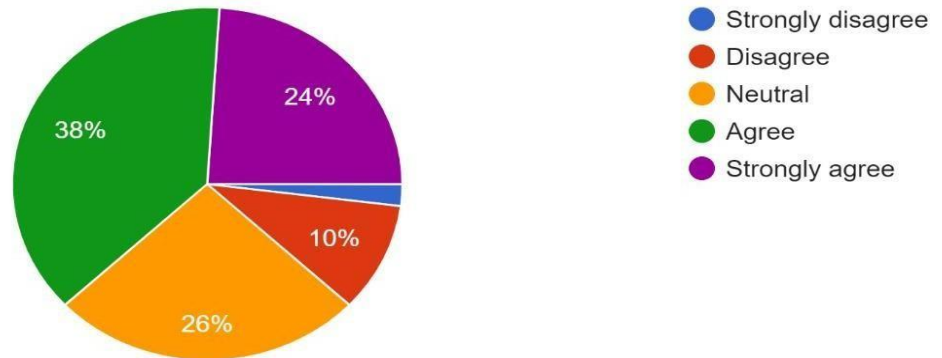
The employees trust the decisions taken by managers Of RESPONDENT

The employees trust the decisions taken by managers

	Count	Percentage
Strongly disagree	2	2%
Disagree	10	10%
Neutral	26	26%
Agree	38	38%
Strongly agree	24	24%
Total	100	100%

The employees trust the decisions taken by managers

100 responses



INFERENCE: Majority of people agreed that the employees trust the decisions taken by managers

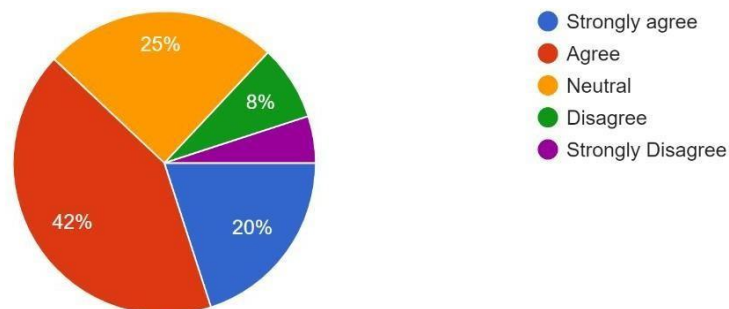
The organization is considered successful in things it attempts to do of

RESPONDENT

The organization is considered successful in things it attempts to do	Count	Percentage
Strongly agree	20	20%
Agree	42	42%
Neutral	25	25%
Disagree	8	8%
Strongly Disagree	5	5%
Total	100	100%

The organization is considered successful in things it attempts to do

100 responses

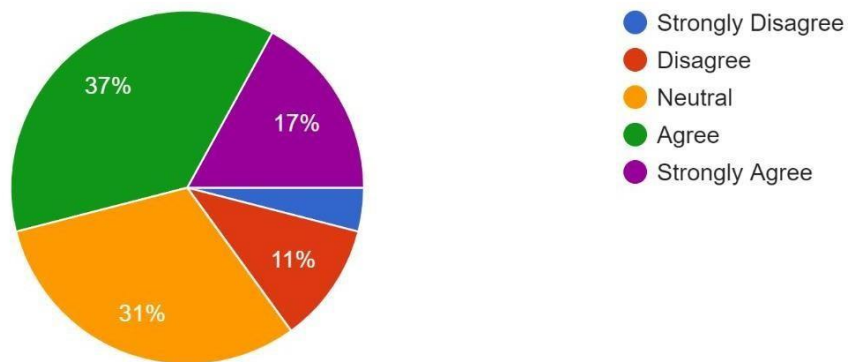


INFERENCE: Majority of people agreed that the organization is considered successful in things it attempts to do

Employees participate in setting the organization goals and values and works to achieve it of RESPONDENT

Option	Count	Percentage
Strongly disagree	4	4%
Disagree	11	11%
Neutral	31	31%
Agree	37	37%
Strongly agree	17	17%
Total	100	100%

Employees participate in setting the organization goals and values and works to achieve it
 100 responses

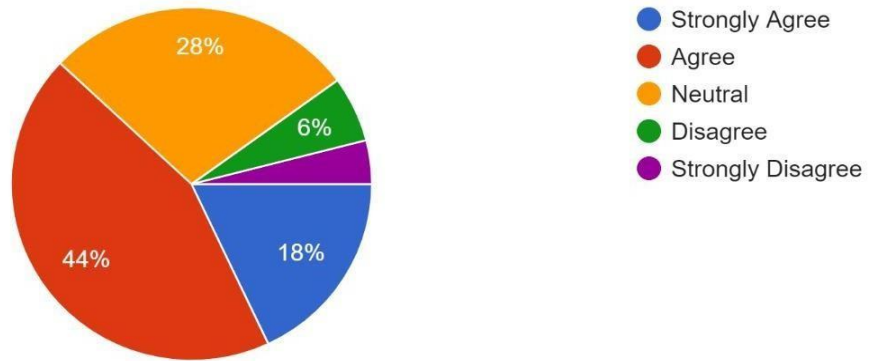


INFERENCE: Majority of people agreed that Employees participate in setting the organization goals and values and works to achieve it

Employees find that their goals and values are similar to the organization goals and values of RESPONDENT

Option	Count	Percentage
Strongly agree	18	18%
Agree	44	44%
Neutral	28	28%
Disagree	6	6%
Strongly Disagree	4	4%
Total	100	100%

Employees find that their goals and values are similar to the organization goals and values
 100 responses

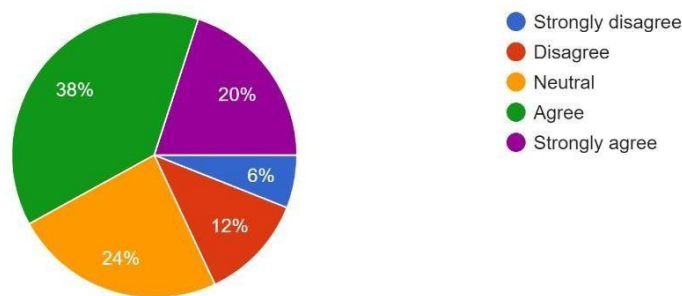


INFERENCE: Majority of people agreed that Employees find that their goals and values are similar to the organization goals and values

Employees understand and know the organization goals and values of RESPONDENT

Option	Count	Percentage
Strongly disagree	6	6%
Disagree	12	12%
Neutral	24	24%
Agree	38	38%
Strongly agree	20	20%
Total	100	100%

Employees understand and know the organization goals and values
 100 responses



INFERENCE: Majority of people agreed that Employees understand and know the organization goals and values

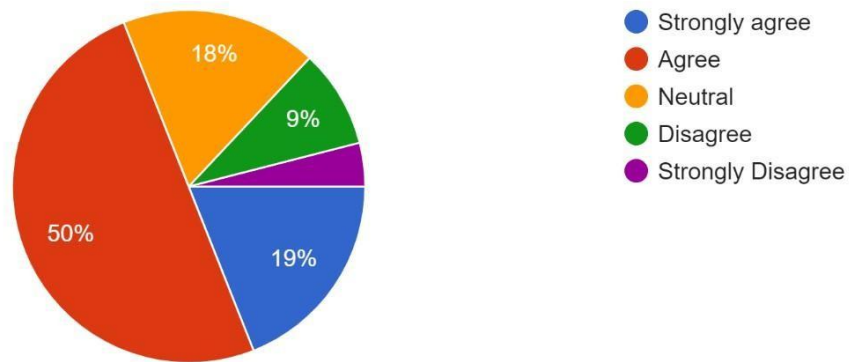
Employees participating in setting organization goals and values helps

them to understanding the nature and the flow of work process of RESPONDENT.

Option	Count	Percentage
Strongly agree	19	19%
Agree	50	50%
Neutral	18	18%
Disagree	9	9%
Strongly Disagree	4	4%
Total	100	100%

Employees participating in setting organization goals and values helps them to understanding the nature and the flow of work process

100 responses

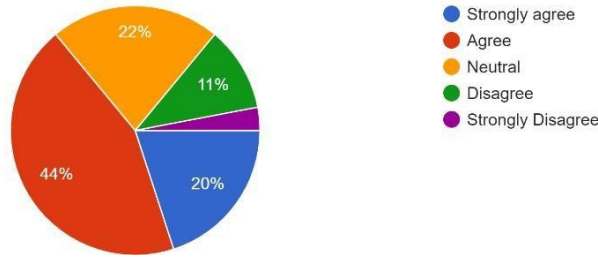


INFERENCE: Majority of people agreed that Employees participating in setting organization goals and values helps them to understanding the nature and the flow of work process

Employees achieve goals easily because they know it well of RESPONDENT

Option	Count	Percentage
Strongly agree	20	20%
Agree	44	44%
Neutral	22	22%
Disagree	11	11%
Strongly Disagree	3	3%
Total	100	100%

Employees achieve goals easily because they know it well
 100 responses



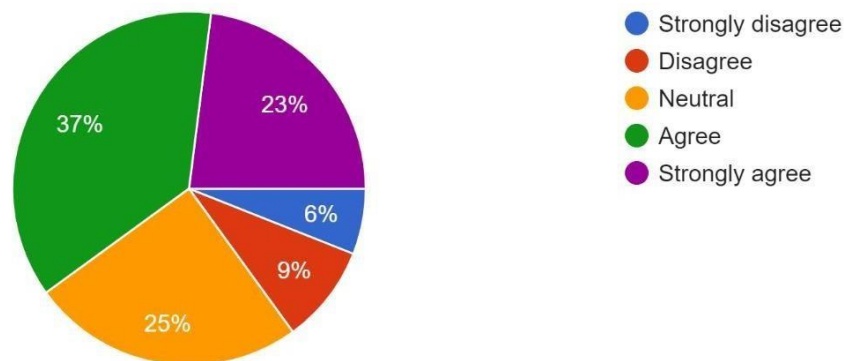
INFERENCE: Majority of people agreed that Employees achieve goals easily because they know it well

Manager encourages employees to express their opinions in planning and implementing the work of RESPONDENT

Manager encourages employees to express their opinions in planning and implementing the work

	1.1.1.1 Count	Percentage	
Strongly disagree		6	6%
Disagree		9	9%
Neutral		25	25%
Agree		37	37%
Strongly agree		23	23%
Total		100	100%

Manager encourages employees to express their opinions in planning and implementing the work
 100 responses



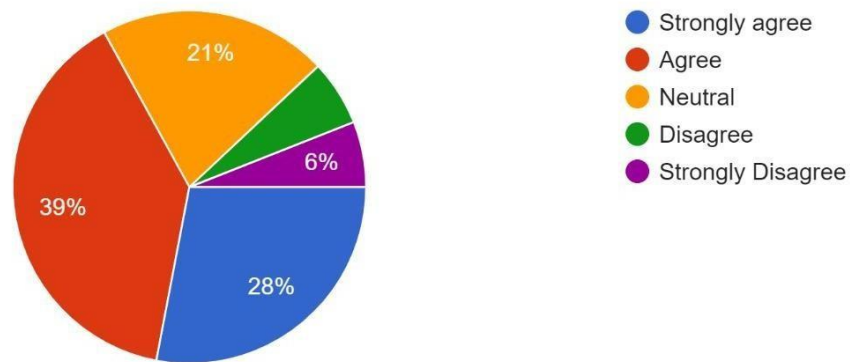
INFERENCE: Majority of people agreed that Manager encourages employees to express their opinions in planning and implementing the work

Manager used varied methods of reward and punishment as required by situation and conditions of RESPONDENT

Manager used varied methods of reward and punishment as required by situation and conditions

	Count	Percentage
Strongly agree	28	28%
Agree	39	39%
Neutral	21	21%
Disagree	6	6%
Strongly Disagree	6	6%
Total	100	100%

Manager used varied methods of reward and punishment as required by situation and conditions
 100 responses



INFERENCE: Majority of people agreed that Manager used varied methods of reward and punishment as required by situation and conditions

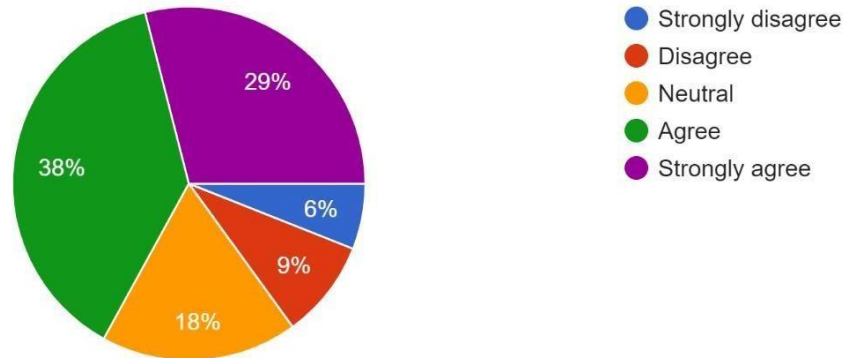
Manager encourages employees to be creative in their work and bring new ideas of RESPONDENT

Manager encourages employees to be creative in their work and bring new ideas

	Count	Percentage
Strongly disagree	6	6%
Disagree	9	9%
Neutral	18	18%
Agree	38	38%
Strongly agree	29	29%
Total	100	100%

Manager encourages employees to be creative in their work and bring new ideas

100 responses



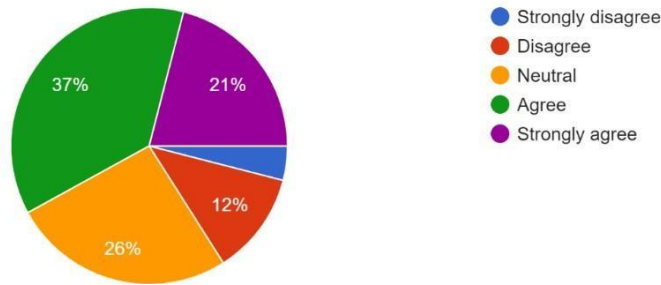
INFERENCE: Majority of people agreed that Manager encourages employees to be creative in their work and bring new ideas.

Manager follow up employees when they late believing that strict supervision makes them feel the importance of their work of RESPONDENT

Manager follow up employees when they late believing that strict supervision makes them feel the importance of their work.				
	Count		Percentage	
Strongly disagree		4		4%
Disagree		12		12%
Neutral		26		26%
Agree		37		37%
Strongly agree		21		21%
Total		100		100%

Manager follow up employees when they late believing that strict supervision make them feel the importance of their work.

100 responses



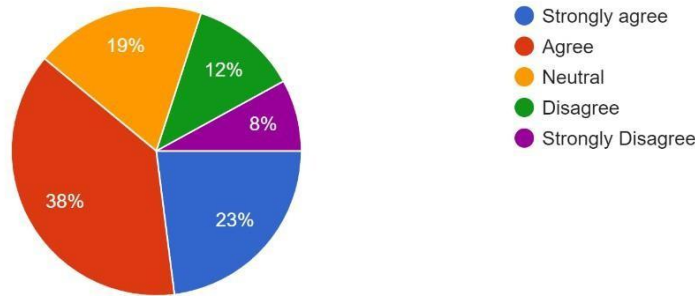
INFERENCE: Majority of people agreed that Manager follow up employees when they late believing that strict supervision makes them feel the importance of their work.

Manager concerns the working procedures and gives employees freedom to choose tasks because he trusts their opinions and decisions of RESPONDENT

Manager concerns the working procedures and gives employees freedom to choose tasks because he trusts their opinions and decisions			
	Count		Percentage
Strongly agree		23	23%
Agree		38	38%
Neutral		19	19%
Disagree		12	12%
Strongly Disagree		8	8%
Total		100	100%

Manager concerns the working procedures and gives employees freedom to choose tasks because he trusts their opinions and decisions

100 responses



INFERENCE: Majority of people agreed that Manager concerns the working procedures and gives employees freedom to choose tasks because he trusts their opinions and decisions

Employees perform their tasks efficiently and effectively of RESPONDENT

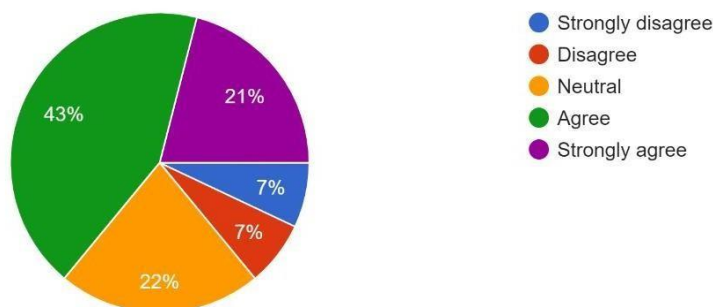
Employees perform their tasks efficiently and effectively

Percentage

Strongly disagree	7	7%
Disagree	7	7%
Neutral	23	23%
Agree	43	43%
Strongly agree	21	21%
Total	100	100%

Employees perform their tasks efficiently and effectively

100 responses



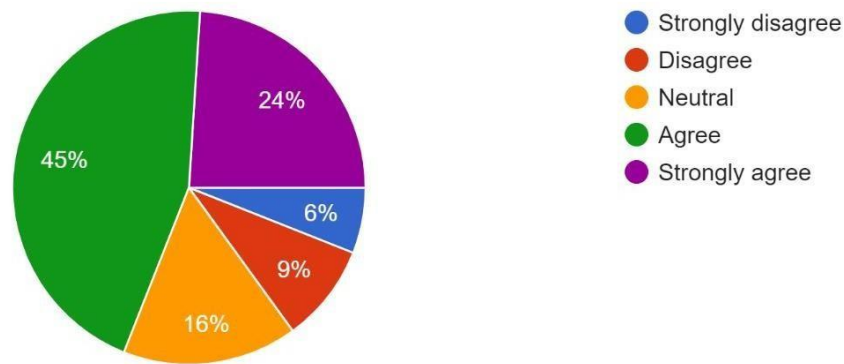
INFERENCE: Majority of people agreed that Employees perform their tasks efficiently and effectively

Employees make their effort to achieve their tasks in the required time of RESPONDENT

Employees make their effort to achieve their tasks in the required time				
	Count		Percentage	
Strongly disagree		6		6%
Disagree		9		9%
Neutral		16		16%
Agree		45		45%
Strongly agree		24		24%
Total		100		100%

Employees make their effort to achieve their tasks in the required time

100 responses



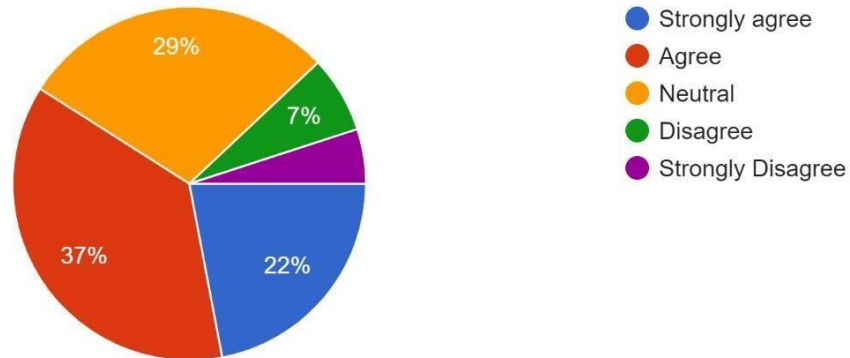
INFERENCE: Majority of people agreed that Employees make their effort to achieve their tasks in the required time

Employees have well known and understand to the nature of the assigned tasks of RESPONDENT

Employees have well known and understand to the nature of the assigned tasks				
	Count		Percentage	
Strongly agree		22		22%
Agree		37		37%
Neutral		29		29%
Disagree		7		7%
Strongly Disagree		5		5%
Total		100		100%

Employees have well known and understand to the nature of the assigned tasks

100 responses

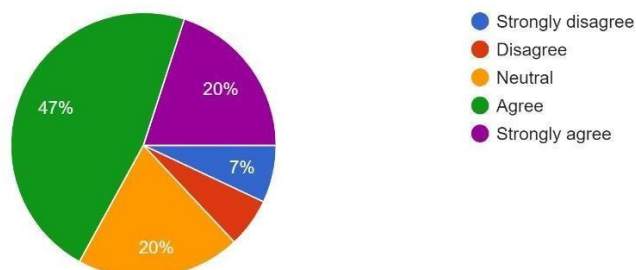


INFERENCE: Majority of people agreed that Employees have well known and understand to the nature of the assigned tasks

Employees participate in decisions that improve their performance of RESPONDENT

Employees participate in decisions that improve their performance	Count	Percentage
Strongly disagree	7	7%
Disagree	6	6%
Neutral	20	20%
Agree	47	47%
Strongly agree	20	20%
Total	100	100%

Employees participate in decisions that improve their performance
 100 responses

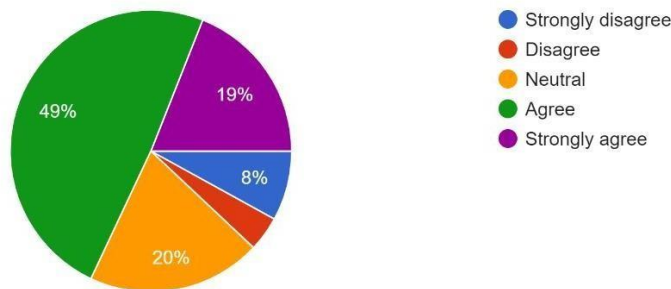


INFERENCE: Majority of people agreed that Employees participate in decisions that improve their performance

Employees take into account the required time to achieve their tasks of RESPONDENT

Employees take into account the required time to achieve their tasks	Count	Percentage
Strongly disagree	8	8%
Disagree	4	4%
Neutral	20	20%
Agree	49	49%
Strongly agree	19	19%
Total	100	100%

Employees take into account the required time to achieve their tasks
 100 responses



INFERENCE: Majority of people agreed that Employees take into account the required time to achieve their tasks

4.2 PERCENTAGE ANALYSIS

Percentage analysis is one of the most widely used tools in financial analysis, as it simplifies numerical data by expressing values in percentage form.

The primary objective of using percentage analysis in this project is to identify how financial resources are allocated across different categories. By converting absolute figures into percentages, it becomes easier to interpret data and identify major areas of expenditure. This method is particularly useful in accounting and financial management, where understanding cost structure plays a crucial role in decision-making.

The formula used for percentage analysis is as follows:

$$\text{Percentage} = \left(\frac{\text{Individual Value}}{\text{Total Value}} \right) \times 100$$

Using this formula, the percentage of each expense category has been calculated. The results of the analysis indicate that salaries account for the largest portion of total expenses. This is expected in most service-based organizations, where human resources play a significant role in operations. A higher percentage of salary expenses indicates that the company relies heavily on its workforce.

4.2.4 Chi-Square Calculation Table

The Chi-Square statistic is calculated using the formula:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Table 4.2.4 – Chi-Square Calculation

Category	O (Observed)	E (Expected)	(O - E) ²	(O - E) ² / E
Low	1	1	0	0
Medium	3	2.5	0.25	0.1
High	2	2.5	0.25	0.1
Low	1	1	0	0
Medium	2	2.5	0.25	0.1
High	3	2.5	0.25	0.1

Total Chi-Square Value
 $\chi^2 = 0.4$

4.3 ANOVA

Table – 4.3.1 ANOVA Table showing the Difference in Mean Monthly Expenses based on Income Levels at Power System, Egmore

H₀: There is no significant relationship between income levels and monthly expenses of the company. H₁: There is a significant relationship between income levels and monthly expenses of the company.

Table 4.2.5 – ANOVA

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	25,000,000	2	12,500,000	15.62	0.002
Within Groups	96,000,000	12	8,000,000		
Total	121,000,000	14			

INTERPRETATION

The above table shows that the p-value (0.002) is less than 0.05. Therefore, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted.

This indicates that there is a significant difference in the mean monthly expenses based on income levels of the company. It can be inferred that as the income level changes, the expenses of the company also vary significantly.

The analysis clearly shows that income level has a strong influence on expense patterns at Power System, Egmore. This suggests that the company adjusts its spending based on its earnings, reflecting dynamic financial management practices.

4.3.2 ANOVA showing Difference in Monthly Income Across Different Months at Power System, Egmore

H_0 : There is no significant difference in monthly income across different months. H_1 : There is a significant difference in monthly income across different months.

Table 4.2.6 – ANOVA

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18,000,000	5	3,600,000	9.45	0.004
Within Groups	22,800,000	12	1,900,000		
Total	40,800,000	17			

INTERPRETATION

The ANOVA table indicates that the p-value (0.004) is less than 0.05, which means the null hypothesis is rejected.

This shows that there is a significant difference in monthly income across different months. The variation in income may be due to changes in project volume, seasonal demand, or operational factors.

It is clear that the company does not generate uniform income every month, but experiences fluctuations, which is common in service-based organizations.

CHAPTER 5 FINDINGS

The findings of the study are based on the analysis of financial data collected during the internship at Power System, Egmore. The results derived from percentage analysis, mean, standard deviation, chi-square test, and ANOVA provide valuable insights into the company's financial performance and accounting practices.

One of the major findings of the study is that the company shows a steady growth in income over the observed period. Although there are minor fluctuations, the overall trend indicates an increase in revenue, which reflects business expansion and improved operational efficiency. This growth suggests that the company is successfully handling its projects and generating consistent income.

The important observations is that the company maintains systematic recording of transactions, which helps in avoiding errors and ensures transparency in financial reporting. Proper documentation of invoices, bills, and vouchers reflects a well-organized accounting system.

It is also found that the company follows a routine financial cycle, where income and expenses are recorded on a regular basis. This consistency helps in tracking financial performance over time and supports better planning. The use of structured accounting practices ensures that all financial activities are properly monitored.

Another key finding is that the company shows controlled spending behavior. Even though expenses increase with income, unnecessary expenditure is minimized. This indicates that the management is cautious in utilizing financial resources and avoids wastage.

The study also highlights that the company maintains profit stability, which is an important indicator of financial health. Despite fluctuations in monthly income, the company manages to maintain a consistent profit margin. This suggests effective cost control and strategic planning.

It is further observed that the company relies on manual and semi-digital accounting methods. While basic software tools may be used, there is still scope for improvement through complete digitalization. This finding indicates an opportunity for modernization.

The interaction with employees shows that the accounts department follows clear roles and responsibilities, which improves efficiency in handling financial tasks. Each employee is aware of

their duties, which reduces confusion and delays.

Another important finding is that the company's financial decisions are influenced by current business conditions. For example, during periods of high income, the company is more willing to invest or spend, whereas during lower income periods, it focuses on cost control.

The study also reveals that the company has limited use of advanced financial analysis tools. Most decisions are based on basic calculations and experience rather than detailed statistical analysis. This indicates a scope for improvement in analytical decision-making.

Overall, the findings suggest that the company has a stable and practical financial system, but there is room for improvement in terms of technology adoption and advanced analysis.

CHAPTER 6

FINDINGS

6.1 Suggestions

The company can focus on better cost control mechanisms, especially in areas such as miscellaneous expenses. Although these expenses are relatively small, controlling them can improve overall profitability. Implementing proper classification and monitoring systems can help in reducing unnecessary costs.

Secondly, since salaries form the largest portion of expenses, the company may consider optimizing workforce efficiency. This can be achieved through proper allocation of tasks, training programs, and performance evaluation systems. Improving employee productivity can reduce cost pressure while maintaining quality of work.

The company should also consider adopting advanced accounting software to improve accuracy and efficiency in financial reporting. Automation of accounting processes can reduce manual errors and save time, enabling better decision-making. By preparing budgets and comparing them with actual performance, the company can identify deviations and take corrective actions. Forecasting future income and expenses can also help in planning financial strategies effectively. The company can further improve by maintaining a detailed record of financial transactions and ensuring transparency in reporting. Proper documentation helps in audits, analysis, and long-term planning. It is also recommended that the company conducts periodic financial analysis using statistical tools. This will help in identifying trends, measuring performance, and making informed decisions. It is advisable to provide training programs for employees in the accounts department. This will help them stay updated with modern accounting practices and improve

their efficiency. Another important suggestion is to maintain better communication between departments, especially between accounts and operations. This will ensure that financial decisions are aligned with business activities. The company may also consider conducting regular

financial performance reviews, where key metrics such as profit, expenses, and revenue are analyzed. This will help in identifying problems early and taking corrective action.

6.2 CONCLUSION

The present study was conducted to analyze the accounting practices and financial performance of Power System, Egmore, based on the data collected during the internship period. The study provided valuable insights into how financial transactions are recorded, analyzed, and interpreted in a real business environment.

The analysis of data using various statistical tools such as percentage analysis, mean, standard deviation, chi-square, and ANOVA has helped in understanding the financial structure of the organization. The results indicate that the company maintains a stable financial position with consistent growth in income and controlled expenses.

One of the key conclusions of the study is that the company follows effective financial management practices, which enable it to maintain profitability despite fluctuations in income and expenses. The accounting system is well-organized and supports efficient decision-making.

The study also highlights the importance of practical exposure in understanding accounting concepts. The internship provided an opportunity to apply theoretical knowledge in a real-world setting, enhancing both technical skills and professional understanding.

Although the study has certain limitations, such as restricted access to data and limited duration, it provides a realistic view of the company's financial operations. The findings and suggestions presented in this report can be useful for improving

accounting practices and enhancing financial performance.

In conclusion, Power System, Egmore demonstrates a strong and stable financial structure, supported by effective accounting systems and sound management practices. The study successfully achieves its objectives and provides meaningful insights into organizational financial analysis.

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ANNEXURES

ANNEXURE 1: PLAGIARISM REPORT



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Assignment 10

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ANNEXURE 2: CONFERENCE / PUBLICATION DETAILS

This annexure presents the conference paper submitted as the outcome of this project, along with the submission details and current review status.

Paper Title	NeuroNudge: Real Time Digital Wellness Through Keystroke and Facial Analysis.
Authors	Rohan Samuel, Rohith Kumar M, B Sandhiya
Conference	4th International Conference on Sustainability Innovation in Computing and Engineering (ICSICE 2026)
Venue	Vasantdada Patil Pratishthan's College of Engineering and Visual Arts (Hybrid Mode)
Date	April 17 th & 18 th , 2026
Publisher	Elsevier Scopus
Paper ID	343
Keywords	NeuroNudge, bimodal emotion recognition, facial expression analysis, keystroke dynamics, cognitive load detection, stress monitoring, fatigue prediction.

ANNEXURE 3: SDG MAPPING

Project Title: Real-Time Digital Wellness Through Keystroke and Facial Analysis

SDG Table:

SDG Goal	Description	Mapped Program Outcomes
SDG 3	Good Health and Well-being	PO1, PO2, PO6
SDG 4	Quality Education	PO2, PO5, PO12
SDG 9	Industry, Innovation and Infrastructure	PO3, PO5, PO11
SDG 8	Decent Work and Economic Growth	PO6, PO7

Justification:

- **SDG 3 (Good Health and Well-being):**
NeuroNudge focuses on detecting stress, fatigue, and cognitive overload using facial and keystroke data. By providing timely interventions, it helps improve mental health and promotes healthier digital usage patterns.
- **SDG 4 (Quality Education):**
The system supports students and learners by improving concentration and reducing distractions during digital study sessions. It also demonstrates practical implementation of AI and human-computer interaction concepts.
- **SDG 9 (Industry, Innovation and Infrastructure):**
The project introduces a scalable and innovative multimodal system that integrates behavioral biometrics and facial analysis within a browser-based platform, showcasing modern technological advancement.
- **SDG 8 (Decent Work and Economic Growth):**
By improving productivity and reducing burnout in digital work environments, the system contributes to better workplace efficiency and sustainable work practices.

ANNEXURE 4: PO-PSO MAPPING

Project Title: Real-Time Digital Wellness Through Keystroke and Facial Analysis PO

Mapping Table: Mapping Level (1-Low, 2-Medium, 3-High)

PO-PSO	Mapping Level	Justification
P01	3	Applies core engineering and AI concepts for emotion detection
P02	3	Analyzes user behavior patterns and cognitive states
P03	3	Designs a multimodal system integrating facial and keystroke data
P04	2	Conducts testing and performance evaluation of the system
P05	3	Uses modern tools like JavaScript, face-api.js, and backend frameworks
P06	3	Addresses real-world issues like stress and digital fatigue
P07	2	Promotes sustainable and healthy digital habits
P08	2	Maintains ethical data handling and user privacy
P09	2	Involves collaborative development and teamwork
P010	2	Requires documentation and system presentation
P011	2	Involves project planning and execution
P012	3	Applies emerging technologies in AI and behavioral analysis
PS01	3	Develops software systems using full-stack technologies
PS02	3	Applies machine learning for real-time behavioral analysis
PS03	3	Implements a practical browser-based application