

A COMPREHENSIVE STUDY ON EMPLOYEE WELFARE WITH REFERENCE TO COMPOSITE MATERIAL MANUFACTURING INDUSTRY

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ABSTRACT

Employee welfare is a critical component of human resource management that significantly contributes to enhancing employee motivation, reducing turnover rates, and improving overall organizational performance. A comprehensive and well-structured welfare system addresses the physical, mental, and social well-being of employees, thereby fostering a supportive and positive work environment. When employees feel valued and cared for, their levels of job satisfaction, loyalty, and productivity tend to increase. This study aims to evaluate the effectiveness of existing employee welfare measures and understand how they are perceived by the workforce. It seeks to identify gaps in the current system and recommend actionable improvements. Furthermore, assessing employee welfare helps ensure that organizations remain compliant with statutory labour welfare laws and ethical standards. By focusing on welfare, companies not only fulfil legal obligations but also promote a culture of well-being and engagement, which in turn contributes to the long-term success and sustainability of the organization.

Keywords: Working conditions, Welfare facilities, Employee engagement, Job satisfaction.

INTRODUCTION

Trio vision Composite Technologies Private Limited is a private company incorporated on September 9, 2015, and is based in Kadapa, Andhra Pradesh. It specializes in the manufacturing of Fiber Reinforced Plastic (FRP) components, offering end-to-end solutions from design development to final production. The company operates out of the Kopparthi Mega Industrial Park and is managed by a team of experienced directors. With a focus on quality, innovation, and advanced composite technologies, Trio vision aims to establish a strong presence in the global market. It has shown notable growth in revenue and net worth, indicating a strong foothold in the composite manufacturing industry. Established in 2015 and based in Andhra Pradesh, the company plays an important role in the advanced manufacturing sector by producing high-quality Fiber Reinforced Plastic (FRP) components. It offers end-to-end solutions from design to full-scale production, serving industries like transportation, infrastructure, and renewable energy. The company has also partnered internationally to supply components for major rail projects. In the financial year ending March 2023, it recorded over 100% growth in revenue, a 470% rise in profit, and a 520% increase in net worth. With a skilled workforce, it continues to support industrial growth and innovation in India.

The composite materials manufacturing industry plays a vital role in the global economy, with a market value of approximately USD 97.4 billion in 2024, and it is projected to grow at a CAGR of 9.3% from 2024 to 2031. This growth is fueled by rising demand for lightweight, durable, and high-performance materials in sectors such as automotive, aerospace, construction, and energy. In

2022, the automotive sector alone accounted for around 21.0% of the industry's total revenue due to the increasing use of composites to improve fuel efficiency and reduce emissions. The industry's contribution extends to technological innovation, job creation, and sustainable manufacturing, making it a key driver of modern industrial growth. The composite materials manufacturing industry plays a key role in modern society by offering high-performance, lightweight, and durable materials. These materials are used in automobiles, aircraft, wind turbines, medical devices, and infrastructure, making them safer, more efficient, and longer-lasting. Composites help reduce fuel consumption and emissions in transport, support clean energy through wind blades, and improve patient outcomes with advanced medical tools. Their resistance to corrosion and wear also reduces maintenance costs and extends product lifespans. Overall, the industry supports innovation, sustainability, and improved living standards across various sectors. Employee welfare in the composite materials manufacturing industry plays a crucial role in ensuring a safe, healthy, and motivated workforce. This industry often involves complex processes and hazardous materials, making health and safety measures a top priority. Companies focus on providing medical support, proper protective equipment, and regular training to maintain workplace safety. In addition, welfare initiatives like housing assistance, transportation, and recreational facilities contribute to overall employee satisfaction. These measures not only enhance productivity but also promote a positive work culture within the industry.

LITERATURE REVIEW

Waititu et al. (2017) examined how employee welfare programs influence performance at Kenya Railways Corporation. The study found a strong positive relationship, highlighting that improved welfare initiatives such as medical cover, housing schemes, and recreation significantly boost employee productivity and satisfaction. The research advocates for strategic investment in welfare to enhance organizational output. It emphasizes welfare as a core HR function in public sector organizations. Gallie et al. (2012) explored the interplay between teamwork, skill development, and employee welfare in the UK. Their findings revealed that collaborative work environments and opportunities for skill enhancement directly contribute to better employee well-being and workplace morale. The study also underscored the role of participative management in shaping positive welfare outcomes. This aligns welfare with broader work design strategies.

Osterman (2000) investigated how organizational restructuring affects work and employee welfare in the U.S. His study noted that while work reorganization can improve efficiency, it often undermines job security and increases stress, thereby weakening welfare. The findings caution against restructuring that neglects the human element. Osterman calls for welfare-sensitive strategies during transitions. Ben-Nasr and Ghouma (2018) found a novel link between employee welfare and stock price crash risk. Their research, spanning multiple firms, suggested that stronger welfare systems reduce the likelihood of negative stock market surprises. This is because well-treated employees are less likely to conceal bad news or act in risky ways. Thus, welfare emerges as a financial risk mitigator.

Ghaly et al. (2015) analyzed corporate cash holdings in relation to employee welfare. They discovered that firms with higher cash reserves are more likely to support robust welfare programs,

suggesting a financial buffer role. Their study emphasized that liquidity enables consistent investment in employee-centric policies. It also reflects stakeholder-centric financial planning.

Lalitha and Priyanka (2014) studied employee welfare in the Indian IT industry. Their findings revealed that modern welfare practices like ergonomic seating, leisure activities, and health care provisions positively impact motivation and retention. Welfare in tech firms was viewed as a tool for sustaining competitive human capital. It highlighted the sector's proactive welfare approach. Liang et al. (2023) revisited the relationship between employee welfare and firm financial performance, using contemporary data. They affirmed that firms with comprehensive welfare policies experienced better financial outcomes, especially in terms of productivity and shareholder value. Welfare, thus, serves as a strategic performance driver. The study bridges HR policy and finance outcomes.

Wei et al. (2020) analyzed the effects of welfare programs on innovation performance in Chinese manufacturing firms. They concluded that investment in employee well-being led to greater creative output and process innovations. Employee welfare was portrayed as a foundation for sustained R&D efforts. The study ties welfare to long-term strategic advantage. Tiwari (2014) focused on employee welfare at Vindhya Telelinks Ltd., India, and its impact on efficiency. The study found a direct correlation between welfare facilities—canteens, restrooms, and health benefits—and improved employee productivity and morale. It emphasized welfare as a practical productivity enhancer in industrial settings. Tiwari advocates routine welfare evaluations. There is limited existing research specifically focused on employee welfare practices at Trio Vision Composite Technologies, Kadapa. The implementation and effectiveness of welfare measures and safety standards remain unexplored. Additionally, the link between welfare facilities and employee job satisfaction at this organization lacks in-depth analysis.

RESEARCH METHODOLOGY

Employee welfare plays a vital role in enhancing motivation, reducing turnover, and improving overall organizational performance. A well-structured welfare system ensures physical, mental, and social well-being of employees, leading to greater job satisfaction and efficiency. This study is essential to assess the effectiveness of current welfare measures, understand employee perceptions, and identify areas needing improvement. It also helps ensure compliance with labour welfare laws and promotes a healthier, more productive work environment. The scope of this study is limited to analysing employee welfare programs, working conditions, job satisfaction, and the implementation of safety and statutory welfare measures at Trio Vision Composite Technologies, Kadapa. It aims to evaluate the effectiveness of current practices and identify areas for improvement to enhance employee well-being and organizational productivity.

Objectives

- To study the employee welfare programmes in the Trio vision composite technologies Kadapa.
- To examine the nature of working environment in Trio vision composite technologies Kadapa.
- To study the job satisfaction with respect to employee welfare facilities in Trio vision composite technologies Kadapa.

Research Design

The research design adopted for studying employee welfare involves both qualitative and quantitative approaches. Structured questionnaires are used to gather measurable data, while interviews and observations provide deeper insights into employee experiences and perceptions, 300 Employees of Trio Vision Composite Technologies PVT LTD, Kadapa.100employees (including junior staff, mid-level managers, and HR personnel), Simple random sampling to ensure representation from different departments. Structured questionnaires will be distributed to employees across different levels. HR managers and supervisors' interviews provide insights into employee welfare job satisfaction, and work place culture, Workplace observations of employee welfare asses workplace environment, satisfaction, and the effectiveness of support programs. Company records on past employee welfare. HR policies and reports related to performance management. Research papers, articles, and case studies on employee welfare on best practices. Statistical tools like percentages, mean, and standard deviation will be used for survey data analysis. Thematic analysis will be used to interpret interview and observation findings. Excel for data analysis.

DATA ANALYSIS AND INTERPRETATION

Are you satisfied with the canteen and food facilities?

Canteen and food facilities are essential welfare services provided by organizations to ensure employees have access to hygienic, nutritious, and affordable meals during work hours. These facilities contribute to employee health, satisfaction, and productivity. A well-managed canteen fosters a positive work environment and helps reduce fatigue and time spent off-site for meals. Many companies also customize food options based on employee preferences and dietary needs.

Table 1.1: To Understand the canteen and food facilities

OPINION	RESPONDENTS	PERCENTAGE
Highly Satisfied	15	15
Satisfied	35	35
Neutral	30	30
Dissatisfied	15	15
Highly Dissatisfied	5	5
TOTAL	100	100

Source: Primary data

Table 1 presents the respondents' opinions regarding the canteen and food facilities. It is observed that 35% of the respondents expressed satisfaction with the facilities, while 15% reported being highly satisfied. A neutral opinion was recorded by 30% of the respondents, indicating that a considerable portion neither expressed satisfaction nor dissatisfaction. On the other hand, 15% of the respondents

were dissatisfied, and 5% were highly dissatisfied with the canteen and food services. Overall, the majority of respondents displayed a favorable or neutral attitude, suggesting that while the canteen facilities are generally acceptable, there is still scope for improvement to enhance satisfaction levels.

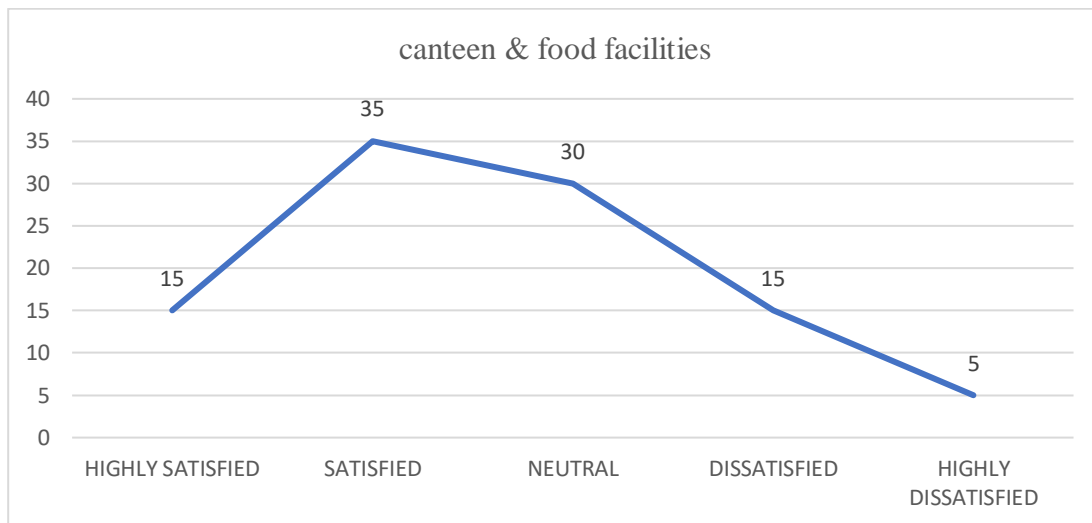


Fig 1 : understand the canteen and food facilities to the organization.

The fig 1 represents respondents' satisfaction levels regarding canteen and food facilities within the organization. The highest number of respondents (35) indicated general satisfaction, followed by 30 respondents who felt neutral. Both dissatisfaction and high satisfaction were reported by 15 respondents each, while only 5 respondents expressed high dissatisfaction. This indicates that while a significant portion of employees are satisfied with the canteen services, a notable number remain neutral or dissatisfied. The relatively low number of highly dissatisfied responses suggests that extreme dissatisfaction is minimal, though there is still room for improvement, particularly in converting neutral or mildly dissatisfied individuals into satisfied ones.

2. Are there creche or childcare facilities available?

Crèche or childcare facilities at the workplace are essential for supporting working parents, especially mothers, by providing safe, supervised care for their children during work hours. These facilities help reduce absenteeism, improve employee focus, and enhance overall job satisfaction.

Table 2.1: To estimate the creche or childcare facilities

OPINON	RESPONDENTS	PERCENTAGE
YES	35	35
NO	65	65
TOTAL	100	100

Source: Primary data

Organizations offering such support demonstrate a commitment to employee welfare and work-life balance. The above table 65% report lack of childcare support. This could be a challenge,

especially for working parents. Setting up a basic crèche or subsidizing childcare can boost morale, reduce absenteeism, and encourage diversity and inclusion.

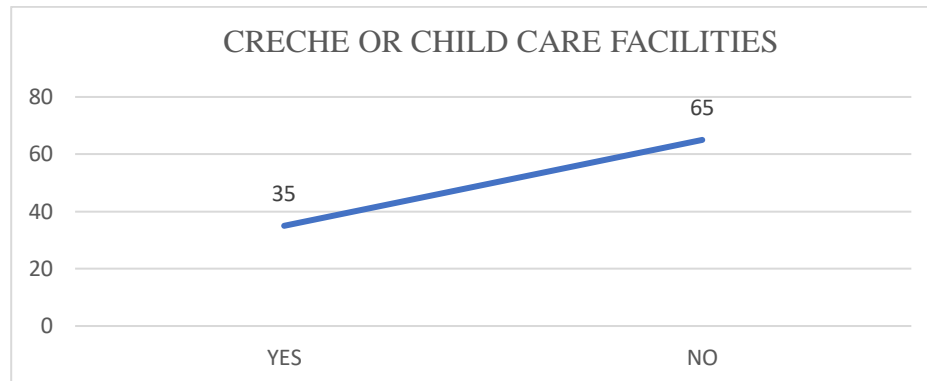


Fig 2: estimate the creche or childcare facilities in the organization.

The fig 1 illustrates respondents' opinions on whether they are satisfied with the overall welfare facilities provided by the organization. Out of the total participants, 65 respondents answered "No," indicating dissatisfaction, while only 35 respondents answered "Yes," showing satisfaction. This suggests that a significant majority of employees are not content with the welfare facilities offered. The disparity highlights a potential concern that the organization may need to address in order to improve employee well-being and satisfaction. Enhancing welfare provisions could lead to better morale, engagement, and productivity among the workforce.

How satisfied are you with the overall welfare facilities provided by the organization?

Welfare satisfaction

Welfare satisfaction is a key indicator of how well an organization supports its employees beyond basic work requirements. It includes access to healthcare, clean facilities, canteen services, safety measures, and emotional well-being programs.

Table 3.1: To estimate the welfare facilities in the organization.

OPINION	RESPONDENTS	PERCENTAGE
Highly Satisfied	25	25
Satisfied	45	45
Neutral	20	20
Dissatisfied	7	7
Highly Dissatisfied	3	3
Total	100	100

Source: Primary data

The above table shows 70% of employees are either satisfied or very satisfied, which is a strong indicator of good welfare infrastructure. However, the 10% who expressed dissatisfaction should

not be overlooked. The organization should collect detailed feedback from this segment to identify specific areas for improvement such as food, restrooms, or medical care.

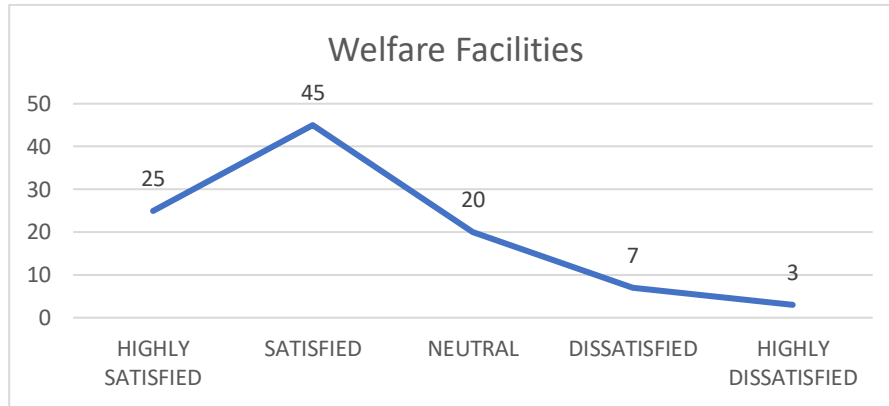


Fig 3: welfare facilities in the organization.

The fig 3 represents employee satisfaction levels regarding the welfare facilities provided by the organization. The majority of respondents (45) reported being satisfied, while 25 expressed high satisfaction, indicating that most employees have a positive perception of the welfare services available. A smaller group (20) maintained a neutral stance, suggesting they neither favored nor disapproved of the facilities. On the other end, 7 respondents were dissatisfied, and only 3 reported high dissatisfaction. This distribution reveals that while the organization is generally meeting employee expectations, there is still a minor segment that feels improvements are needed. Addressing the concerns of the dissatisfied group could help further enhance overall satisfaction.

Does the company support of work-life balance?

The company fosters a healthy work-life balance by encouraging flexible schedules and respecting personal time. This supportive environment helps reduce stress and enhances overall well-being. Employees are empowered to maintain harmony between their professional and personal lives.

Table 4 : the supportive work-life culture

OPINION	RESPONDENTS	PERCENTAGE
Highly Satisfied	20	20
Satisfied	40	40
Neutral	25	25
Dissatisfied	10	10
Highly Dissatisfied	5	5
Total	100	100

Source: Primary data

From the above table combined 60% say yes, but 15% disagree. This implies that while policies may exist (flexible hours, leave policies), their implementation might not be uniform. Managers should be trained to ensure these benefits are accessible and not just theoretical.

The fig 4 shows that a majority of respondents (40) are satisfied with their work-life balance, while 20 report high satisfaction. About 25 of employees remain neutral, indicating moderate opinions. However, 10 expressed dissatisfactions, and 5 reported high dissatisfaction.

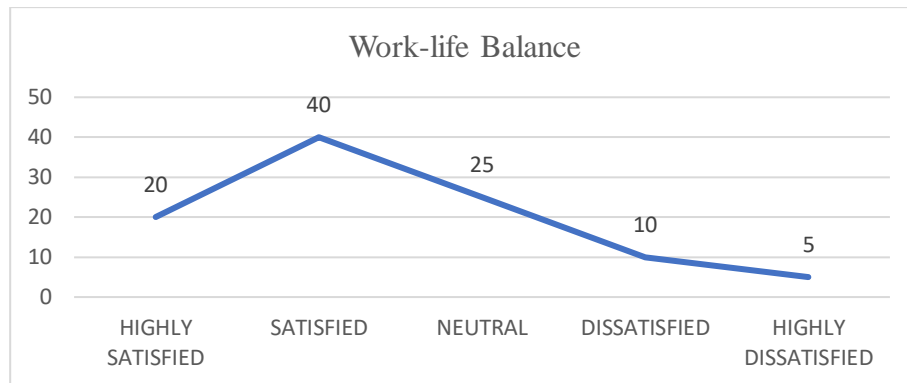


Fig 4 : Supportive work-life culture in an organization

Overall, the data suggests a positive trend in work-life balance perceptions, but some employees still face challenges, highlighting the need for more flexible and supportive workplace policies.

Does the organization provide adequate healthcare or medical support?

Healthcare support refers to the medical and wellness services provided by an organization to ensure the physical well-being of its employees. This includes first-aid facilities, health insurance, regular medical check-ups, and emergency care. Adequate healthcare support boosts employee confidence, reduces health-related absenteeism, and reflects the organization's commitment to employee welfare.

Table 5 : The healthcare support in an organization.

OPINION	RESPONDENTS	PERCENTAGE
Highly Satisfied	22	22
Satisfied	38	38
Neutral	25	25
Dissatisfied	10	10
Highly Dissatisfied	5	5
Total	100	100

Source: Primary data

From the above table 60% feel healthcare facilities are sufficient, a significant 25% are neutral suggesting either lack of awareness or minimal usage. The 15% dissatisfied might point to issues

like insufficient coverage, lack of an on-site nurse, or long claim processing. The company should conduct awareness sessions and ensure visible access to medical support

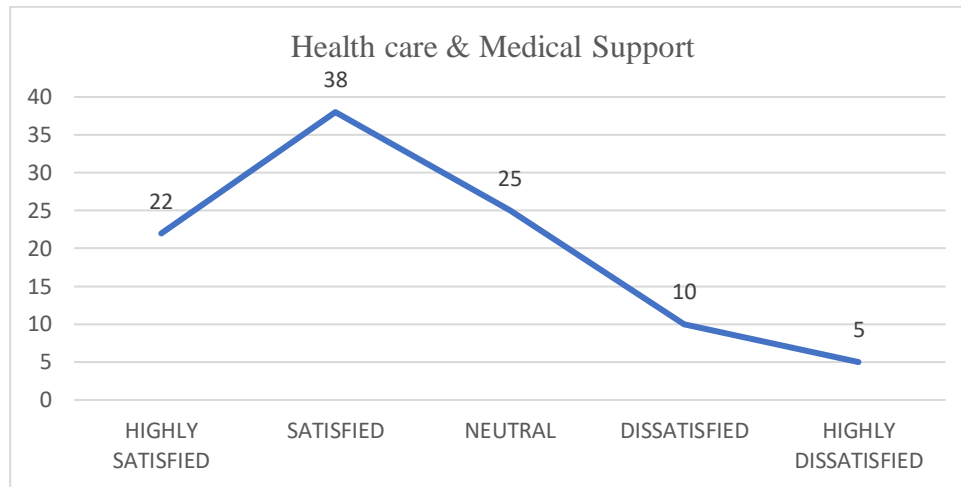


Fig 5 To estimate the healthcare support in an organization

The graph 5 indicates that the majority of employees (38) are satisfied, followed by 25 who are neutral and 22 who reported high satisfaction. A smaller percentage of respondents expressed dissatisfaction (10) and high dissatisfaction (5). Overall, the results reflect a generally positive sentiment toward the evaluated factor, with most employees experiencing satisfaction, although a few still face issues that need attention.

ANALYSIS OF FINDINGS

The analysis of employee feedback reveals mixed perceptions regarding various welfare measures within the organization. Approximately 50% of employees expressed satisfaction with the canteen facilities, suggesting a moderate level of contentment and highlighting the potential for improvement in this area. A notable concern emerged with 65% of employees reporting the absence of childcare or crèche facilities, indicating a significant gap in the current welfare framework. On a positive note, 70% of employees expressed satisfaction or high satisfaction with the overall welfare facilities, pointing to a generally strong and supportive welfare infrastructure. Additionally, 60% acknowledged the presence of flexible work policies, reflecting the organization's intent to accommodate work-life balance. Similarly, 60% of employees found the healthcare facilities to be adequate, which signals a generally favourable perception of the organization's medical support services. These findings underscore both the strengths and areas for development within the company's employee welfare initiatives.

RECOMMENDATIONS

Employee Welfare

Managerial implications on employee welfare in the composite materials manufacturing industry include the need for proactive policies that ensure safety, health, and well-being at the workplace. Managers must implement effective welfare programs to reduce stress and increase productivity. Proper communication and feedback systems are essential to address employee concerns.

Investing in welfare enhances job satisfaction and reduces turnover. Overall, strong welfare measures lead to a more committed and efficient workforce.

Policy Makers Implication

Policymakers play a crucial role in shaping employee welfare in the composite materials manufacturing industry. They must ensure that labor laws and welfare regulations are properly implemented and updated to match industry advancements. Emphasis should be placed on occupational safety, health standards, and social security benefits. Policies should also encourage skill development and equal opportunity practices. Effective policymaking promotes a balanced work environment, boosting employee morale and productivity.

Scholarly Contribution

Scholars have contributed significantly to the understanding of employee welfare in the composite materials manufacturing industry. Their research highlights the importance of welfare programs in enhancing employee satisfaction, productivity, and retention. Studies have emphasized the role of safety measures, health benefits, and work-life balance in high-risk manufacturing environments. Scholars also explore the impact of welfare practices on organizational performance and employee engagement. These contributions provide valuable insights for developing effective HR strategies in the industry.

Scope for further study

The scope for future study on employee welfare in the composite materials manufacturing industry is broad and valuable. Future research can explore the long-term impact of welfare measures on employee performance and organizational growth. Comparative studies between traditional and modern welfare practices across similar industries can offer deeper insights. There is also potential to examine the effectiveness of digital tools and automation in managing employee welfare programs. Additionally, investigating employee perceptions and satisfaction levels in relation to specific welfare initiatives can help refine HR policies.

Limitations

The study on employee welfare at Trio Vision Composite Technologies has a few limitations. It is based on a specific group of employees, which may not reflect the opinions of the entire workforce. Some responses may be biased or influenced by personal perceptions. Time constraints also limited the depth of data collection and analysis. Therefore, the findings should be viewed with some caution.

CONCLUSION

Employee welfare in the composite materials manufacturing industry plays a vital role in ensuring workforce satisfaction and productivity. Proper welfare measures contribute to a safer and healthier work environment. They help reduce employee turnover and improve morale. Effective implementation of welfare policies enhances organizational efficiency. Overall, employee welfare is essential for sustainable industrial growth.

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