

# A Study on Employee Engagement Practices and Their Impact on Retention in Trident Pneumatics

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## ABSTRACT

This study provides an in-depth analysis of employee engagement practices at Trident Pneumatics and examines their direct and indirect influence on employee retention. In the current competitive business environment, retaining skilled and motivated employees is a crucial factor for organizational sustainability and growth. As such, employee engagement has emerged as a key strategic priority, reflecting the degree to which employees are emotionally and intellectually connected to their work and organization.

The primary objective of this research is to identify the various employee engagement initiatives currently implemented at Trident Pneumatics and to assess how these initiatives impact employee satisfaction, involvement, and overall intention to remain within the organization. The study further investigates the correlation between different engagement factors—such as recognition, effective communication, training and development, career advancement, leadership involvement, and work environment—and employee retention.

A descriptive research design was adopted to capture and interpret the existing practices and employee perceptions accurately. Primary data was collected through structured questionnaires, designed with both qualitative and quantitative questions, and administered to a stratified random sample of employees across different functional departments. The study also utilized secondary data sources, including company records and relevant literature, to support the analysis.

For data analysis, tools such as percentage analysis, mean score ranking, and correlation analysis were applied to identify patterns and relationships between engagement practices and turnover intentions. The results of the study revealed a strong positive correlation between well-executed engagement strategies and higher retention rates. Employees who experienced greater involvement, received constructive feedback, and were provided with opportunities for growth and recognition demonstrated a significantly stronger commitment to the organization.

## Keywords:

Employee Engagement , Retention , Organizational Commitment

## CHAPTER – 1

### INTRODUCTION

#### 1.1 INTRODUCTION OF THE STUDY

The manufacturing industry forms the backbone of many economies, contributing significantly to national income, exports, and employment. Within this sector, the blue-collar workforce consisting of machine operators, technicians, assemblers, welders, and maintenance staff plays a vital role. Despite technological advances and automation trends, human labor remains irreplaceable in many manufacturing processes, particularly in tasks requiring adaptability, manual dexterity, and real-time problem-solving. Consequently, the recruitment and retention of a skilled and reliable blue-collar workforce are fundamental to maintaining production efficiency and competitiveness.

However, recruiting blue-collar workers has become increasingly difficult for manufacturers. Several factors contribute to this growing problem. Firstly, there is a demographic shift: many older workers are retiring, while younger generations are less inclined to pursue blue-collar jobs, often preferring service-oriented or technology-driven careers. Secondly, globalization and supply chain restructuring have increased competition for skilled labor across regions. Thirdly, traditional hiring methods have remained largely unchanged over decades and are proving inadequate in the modern, fast-paced environment.

Historically, recruitment for blue-collar roles has relied heavily on local advertisements, walk-ins, community referrals, and employment agencies. While these channels have served their purpose, they come with limitations. They tend to be slow, geographically constrained, lack transparency, and provide little opportunity for workers to actively explore opportunities beyond their immediate vicinity. Employers often experience delays in filling urgent vacancies, while workers struggle with limited information about job availability, work conditions, and pay structures. Mismatches between employer expectations and worker skills further complicate the process, leading to high turnover rates and associated training costs.

Meanwhile, a transformative shift is taking place. The proliferation of mobile technology has reshaped how individuals access information, communicate, and make decisions. Smartphone ownership has expanded rapidly, even among low-income and rural populations, fueled by cheaper devices, affordable internet access, and growing digital literacy initiatives. According to a 2024 report by GSMA, over 75% of the global population has access to mobile internet, with smartphone penetration among blue-collar workers reaching unprecedented levels.

## 1.2 INDUSTRY PROFILE

The pneumatics industry is a vital segment of the broader industrial automation sector. It involves the use of compressed air to transmit and control energy in various industrial applications. Pneumatic systems are widely used in sectors such as manufacturing, automotive, pharmaceuticals, packaging, electronics, and food processing due to their reliability, cost-effectiveness, and safety.

### Market Overview

The global pneumatics market has seen steady growth due to increased demand for automation in industrial processes.

India's pneumatics market is growing, driven by the expansion of manufacturing facilities, government initiatives like Make in India, and increased demand for automation in SMEs.

Key product categories in the industry include air compressors, valves, actuators, cylinders, FRL units (Filter, Regulator, Lubricator), and other accessories.

### Key Characteristics

**Energy-efficient systems:** Pneumatic solutions are known for low energy consumption and minimal maintenance.

**Clean and safe:** Ideal for environments requiring clean operations, such as food and pharmaceuticals.

**Customization:** Products can be customized for specific industrial needs.

**Integration:** Pneumatics are often integrated with electronic and hydraulic systems for enhanced performance.

## 1.3 COMPANY PROFILE



Established in 1988 and headquartered in Coimbatore, Tamil Nadu, India, Trident Pneumatics Pvt. Ltd. is a leading manufacturer specializing in compressed air treatment and gas generation solutions. Over the past three decades, the company has built a strong reputation for delivering innovative, high-quality products tailored to meet the diverse needs of industries worldwide.

Nacka, Sweden, January 7, 2025: Trident Pneumatics Pvt. Ltd. A manufacturer of compressed air treatment and on-site gas generation based in India, has become part of Atlas Copco Group.

Trident Pneumatics offers a comprehensive range of products, including:

- **Compressed Air Dryers:** Refrigeration and desiccant air dryers designed for efficient moisture removal.
- **Automatic Drain Valves:** Advanced condensate management solutions.
- **Compressed Air Filters:** High-efficiency filters ensuring optimal air quality.
- **Gas Generators:** On-site nitrogen and oxygen generators for various applications.
- **Custom Solutions:** Tailored air treatment systems to meet specific client requirements.

The company's products are utilized across multiple sectors, including manufacturing, healthcare, automotive, textiles, and railways.

Trident Pneumatics is committed to maintaining the highest quality standards. The company holds ISO 9001:2015 and ISO 14001:2015 certifications, reflecting its dedication to quality management and environmental responsibility. With a strong focus on research and development, Trident has developed patented technologies in areas such as condensate sensing and valve design, underscoring its commitment to innovation.

## SWOC ANALYSIS OF A COMPANY

### Strengths

- **Established Industry Presence:** Trusted brand in compressed air treatment and gas generation with decades of experience.
- **Wide Product Range:** Offers innovative solutions such as air dryers, nitrogen generators, and filtration systems.

### Weaknesses

- **Limited Online Visibility:** Compared to global competitors, digital presence and brand promotion are modest.
- **Dependence on Industrial Sector:** Economic slowdowns or disruptions in manufacturing can directly impact demand.
- **Relatively Smaller Global Footprint:** Presence in select countries; not yet a dominant global player.

### Opportunities

- **Expansion in Global Markets:** Growing demand for industrial automation and clean air systems abroad.
- **Green and Sustainable Technology:** Potential to develop eco-friendly and energy-efficient solutions.
- **Strategic Collaborations:** Partnering with OEMs and automation companies to broaden reach.

### Challenges

- **Intense Market Competition** The pneumatic and gas generation sector is highly competitive, with both domestic and international players offering similar or advanced technologies. Competing on pricing, innovation, and service quality is a constant challenge.

- **Technological Advancements** Rapid technological changes require continuous investment in R&D and upgrading of manufacturing capabilities to keep pace with evolving customer demands and maintain product relevance.

## 1.4 SCOPE OF THE STUDY

This study focuses on comprehensively evaluating the employee engagement practices implemented at Trident Pneumatics and assessing their impact on employee retention within the organization. It delves into key dimensions of engagement, including internal communication effectiveness, recognition and rewards, opportunities for career development, quality of the work environment, and the level of support provided by management and leadership. By examining these factors, the research aims to understand how they collectively influence employees' job satisfaction, motivation, and their intention to remain with the company over the long term.

The scope of the study is limited to employees across various departments and hierarchical levels within Trident Pneumatics, ensuring a balanced representation of views from different roles and experiences. Using both qualitative and quantitative methods—primarily structured questionnaires and relevant HR data—the study collects actionable insights directly from the workforce.

The findings are intended to provide valuable feedback to the HR department and senior management, highlighting strengths in current engagement practices as well as areas that need improvement. Ultimately, the goal is to enable the company to align its employee engagement initiatives with its strategic retention objectives, thereby fostering a more committed, productive, and motivated workforce. This alignment is expected to not only reduce attrition rates but also enhance overall organizational performance and employee morale.

## CHAPTER 2

### REVIEW OF LITERATURE

#### 2.1 REVIEW OF LITERATURE

**Siswanto (2024)** Siswanto's study emphasized the significant role leadership style and organizational culture play in influencing employee engagement and retention. Focusing on transformational leadership and a culture of empowerment, the study found that when employees feel supported, heard, and given autonomy in their roles, they develop a stronger emotional bond with the organization. This emotional attachment, in turn, results in lower turnover intentions and a greater willingness to contribute meaningfully to organizational goals. The research recommends creating flexible, inclusive environments where career growth and trust are prioritized.

**Dyke-Erika & Amah (2022)** This literature review examined the dimensions of employee engagement—cognitive, emotional, and behavioural—and how this influence talent retention. The authors argue that organizations must understand and nurture all three dimensions to create a fully engaged workforce. The study highlighted that consistent communication, meaningful work, and employee well-being initiatives are essential to reducing voluntary exits. It concluded that proactive engagement strategies tailored to employee needs significantly improve long-term retention and organizational performance.

**Storey (2020)** In her dissertation, Storey explored strategies that first-line supervisors in U.S. federal agencies can use to increase employee engagement. The study focused on the supervisor's role in creating inclusive, supportive environments and the impact of regular feedback on employee morale. The research showed that supervisors who actively engage their teams through communication and personal recognition contribute directly to higher retention levels and workplace satisfaction. Storey concluded that leadership engagement at all levels is crucial to sustaining employee loyalty.

**Munish & Agarwal (2017)** In their comprehensive literature review, Munish and Agarwal explored key engagement drivers such as career development opportunities, supportive leadership, and work-life balance. They concluded that when employees perceive growth

**Chandani et al. (2016)** highlighted the importance of consistent employee engagement strategies in fostering a strong emotional connection between employees and their organization. The study identified key engagement practices such as rewards, recognition, and leadership involvement as critical factors in enhancing employee loyalty. By maintaining ongoing engagement efforts, organizations can reduce turnover intentions and improve employee commitment. The study emphasized that when employees feel valued and supported through these practices, they are more likely to stay with the organization and contribute positively to its growth.

**Mehta (2016)** Mehta's paper provided a focused analysis on the factors that influence employee engagement across industries. It identified leadership, internal communication, rewards, and training as foundational elements that build an engaged workforce. The study argued that engagement is a psychological investment that employees make in their roles, and this investment grows stronger when organizations create trust-based environments. Mehta stressed that companies that actively measure and respond to employee engagement levels enjoy better retention, increased loyalty, and stronger business outcomes.

## 2.2 PROBLEM STATEMENT

In today's highly competitive business environment, organizations across industries are increasingly challenged with retaining skilled and experienced employees. High turnover rates not only disrupt workflow and increase recruitment and training costs but also negatively impact employee morale, team cohesion, and overall organizational performance. Despite implementing various employee engagement initiatives, many companies including **Trident Pneumatics**—continue to face persistent retention issues. This indicates a potential disconnect between the engagement strategies being applied and the actual expectations, needs, and experiences of the employees.

While Trident Pneumatics has made considerable efforts to foster a positive work environment through recognition programs, development opportunities, and supportive leadership, the continued employee attrition suggests that these practices may not be fully effective or adequately targeted. There is a critical need to evaluate whether current engagement measures are aligned with employee aspirations and whether they genuinely enhance job satisfaction, motivation, and a sense of belonging within the organization.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 RESEARCH DESIGN

This study adopts a descriptive research design aimed at understanding and analysing the current employee engagement practices and their influence on employee retention at Trident Pneumatics. The purpose of this design is to systematically describe the facts and characteristics of a given population or area of interest, in this case, employee engagement and retention.

The research uses both quantitative and qualitative methods to gather insights. Primary data is collected using structured questionnaires and interviews with employees across various departments. The study measures variables such as satisfaction, motivation, communication, and intent to stay, and then examines their correlation with existing retention patterns.

#### 3.2 SAMPLING DESIGN

1. **Sampling Technique:** The study adopts a stratified random sampling technique. Employees of Trident Pneumatics are divided into different strata based on departments (e.g., production, administration, R&D, HR, sales), and random samples are drawn from each group to ensure fair representation across the organization.
2. **Sampling Method:** Probability sampling is used to ensure that every employee has an equal chance of being selected. This increases the reliability and generalizability of the study findings within the organization.

3. **Sample Size:** A total of 80 to 120 employees will be surveyed, depending on the total number of employees available and willing to participate. The sample size is determined considering the population size, time constraints, and the desired confidence level.
4. **Sampling Unit:** The individual employee is the primary sampling unit. This includes both managerial and non-managerial staff who have been with the company for a minimum of 6 months.
5. **Population:** The target population includes all permanent employees currently working at Trident Pneumatics across different departments.

### AREA OF STUDY:

The study is conducted at Trident Pneumatics Pvt. Ltd., Coimbatore, a leading manufacturer in the pneumatic and air treatment industry. The focus is on understanding how the company's employee engagement practices influence staff retention across various departments. By analyzing engagement levels, workplace satisfaction, and feedback from employees, the study aims to provide insights that can help strengthen HR strategies and reduce turnover.

### Source of Data:

The study will use both **primary** and **secondary** sources of data.

- **Primary Data:** Collected through structured questionnaires and personal interviews with employees at Trident Pneumatics.
- **Secondary Data:** Gathered from company HR records, official websites, previous research studies, journals, and internal reports related to employee engagement and retention.

### 3.3 OBJECTIVES OF THE STUDY

- ✓ To assess the level of employee satisfaction and involvement resulting from these engagement initiatives.
- ✓ To analyse the relationship between employee engagement and employee retention within the organization.
- ✓ \* To provide recommendations for enhancing employee engagement strategies to improve retention and overall organizational performance

### 3.4 TOOLS USED FOR THE STUDY

#### 1. Data Collection Tools:

**Structured Questionnaire:** A well-designed questionnaire consisting of closed-ended questions (including Likert scale, multiple-choice, and ranking questions) is used to gather primary data from employees.

#### 2. Data Analysis Tools:

**Microsoft Excel / Google Sheets:** Used for coding, tabulating, and organizing data for analysis, including creation of charts and graphs.

##### ➤ Statistical Tools:

- **Percentage Analysis:** To understand the distribution of responses across categories.
- **Chi-Square Test:** To examine relationships between categorical variables (e.g., department vs. satisfaction level).



- **Correlation Analysis:** To identify the relationship between employee engagement and retention levels.
- **Mean and Standard Deviation:** To measure average engagement scores and variation among employees.
- **SPSS (Optional):** For more advanced statistical testing, SPSS can be used to run detailed analysis and hypothesis testing.

## CHAPTER 4

### DATA ANALYSIS AND INTERPRETATION

#### Hypothesis testing

The hypothesis testing will be tested by the following techniques:

1. CHI-SQUARE TEST
2. ANOVA
3. Correlation

#### CHI-SQUARE TEST

Chi-square is the measure which checks or evaluates the extent to which a set of the observed frequencies of a sample deviates from the corresponding set of expected frequencies of the samples. It is the measure of aggregate discrepancies actual and expected frequencies. This distribution is called  $\chi^2$  distribution. It was first introduced by helmet in 1875. It is also known as "goodness for fit". It is used as a test static in testing hypotheses that provides the theoretical frequencies with which observed frequencies are observed

#### ANOVA (analysis of variance)

In stats we mostly want to get information if the mean of two popular people is equal. To answer this, we need to use Anova (analysis of variance). It is a particular type of statistical hypothesis testing mostly used in the analysis of experimental data. In the typical application of Anova (analysis of variance), the Hypothesis which is Null is that all groups are simply random samples of the same population. The wording of Anova (analysis of variance) is the synthesis of different types ideas and it is always used for various purposes and implement it.

#### Correlation

Correlation is a statistical tool used to measure the strength and direction of the relationship between two variables. In the context of this study, correlation helps to determine whether there is a meaningful connection between employee engagement and employee retention at Trident Pneumatics. A positive correlation would suggest that higher levels of engagement are associated with higher retention rates, meaning that as employees feel more involved and valued, they are more likely to stay with the organization.

**Do you think employee engagement practices help reduce turnover in your team?**

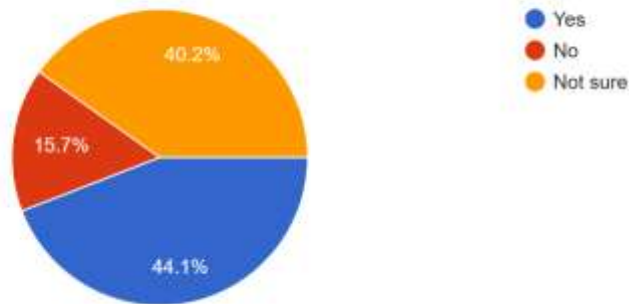
**TABLE 4.11 SHOWING THE RESPONDENT THINK EMPLOYEE ENGAGEMENT PRACTICES HELP REDUCE TURNOVER IN YOUR TEAM**

Particulars	No. of respondents	Percentage of Respondents
Yes	45	44.1%
No	16	15.7%
Not sure	41	40.2%
<b>Total</b>	<b>102</b>	<b>100%</b>

#### CHART 4.11 SHOWING THE RESPONDENT THAT THINK EMPLOYEE ENGAGEMENT PRACTICES HELP REDUCE TURNOVER IN YOUR TEAM

Do you think employee engagement practices help reduce turnover in your team?

102 responses



#### INTERPRETATION

The data indicates that 44.1% of respondents answered "Yes," while 40.2% were "Not sure" and 15.7% said "No," suggesting that although a significant portion responded positively, there is considerable uncertainty among participants.

**In your opinion, what is the most important factor in employee retention at Trident Pneumatics?**

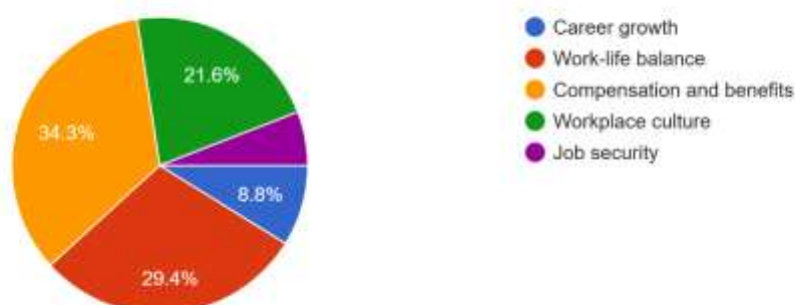
**TABLE 4.12 SHOWING THE RESPONDENT THAT FACTORS IMPORTANT IN EMPLOYEE RETENTION AT TRIDENT PNEUMATICS**

Particulars	Particulars	Percentage of Respondents
Career growth	9	8.8%
Work-life balance	30	29.4%
Compensation and benefits	35	34.3%
Workplace culture	22	21.6%
Job security	9	8.8%
<b>Total</b>	<b>102</b>	<b>100%</b>

#### CHART 4.12 SHOWING THE RESPONDENT THAT FACTORS IMPORTANT IN EMPLOYEE RETENTION AT TRIDENT PNEUMATICS

In your opinion, what is the most important factor in employee retention at Trident Pneumatics?

102 responses





## INTERPRETATION

The data shows that "Compensation and benefits" (34.3%) and "Work-life balance" (29.4%) are the most valued factors among respondents, followed by "Workplace culture" (21.6%). "Career growth" and "Job security" were each selected by 8.8%, indicating that while financial and personal well-being are top priorities, fewer respondents emphasized long-term career progression or job stability.

## CHAPTER – V

### FINDINGS, SUGGESTIONS AND CONCLUSION

#### 5.1 FINDINGS

- Majority of respondents are under 25 (68.6%), reflecting a predominantly young demographic.
- Majority of respondents are male (93.1%), indicating a significant gender imbalance.
- Majority have 1–3 years of experience (52.9%), showing an early-career participant base.
- Majority hold a Bachelor's degree (46.1%), with another sizeable segment (29.4%) holding a Master's or higher.
- Majority answered "Yes" (59.8%), while 21.6% were unsure and 18.6% said "No."
- Majority participate on a quarterly basis (36.3%), with fewer doing so monthly (21.6%) or weekly (14.7%).
- Majority have experienced training and development programs (62.7%), followed by recognition and rewards (53.9%).
- Majority rated their experience at level 4 (34.3%), with the next largest group at level 3 (30.4%).
- Majority engage at least "Sometimes" (37.3%), and 31.4% said "Always," indicating generally regular engagement.

#### 5.2 SUGGESTIONS

- Conduct regular employee feedback surveys to understand evolving needs and expectations.
- Customize engagement activities based on employee demographics and departmental roles.
- Organize focus group discussions to collect in-depth opinions on current engagement strategies.
- Improve communication about the goals and benefits of engagement initiatives.
- Encourage managers to actively support and promote engagement practices within their teams.

#### 5.3 CONCLUSION

The findings of this study highlight key insights into employee demographics, engagement levels, and workplace priorities. It is evident that the majority of respondents are young, early-career professionals who value compensation, work-life balance, and professional development opportunities. While there is active participation in some initiatives like training and recognition, areas such as feedback and wellness programs require more attention. Additionally, the high number of neutral and uncertain responses points to a need for clearer communication and stronger organizational involvement strategies. To build a more engaged and satisfied workforce, organizations should act on these insights by implementing inclusive, transparent, and responsive engagement practices. Overall, the project emphasizes the importance of understanding employee perceptions as a foundation for creating a more productive and positive workplace environment.

#### 5.4 LIMITATIONS OF THE STUDY

- The study is focused solely on employees of Trident Pneumatics and may not be applicable to other organizations or industries.
- The reliance on self-reported responses may introduce personal biases or social desirability effects, affecting the accuracy of the data.

- The sample size may not adequately represent all departments or employee categories within the company, limiting the comprehensiveness of the findings.

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