International Journal for Novel Research in Economics , Finance and Management
www.ijnrefm.com
ISSN:3048-7722
Volume 4, Issue 5, Sep-Oct-2026, PP: 01-10

Employee Engagement and Productivity: A Case Study of Mecon Limited, Ranchi

Khushi Gupta, Nupur Kumari Munda, Srishty Tirkey, Sheetal Kachhap, Anjali Lakra, Sheetal Suman Soreng, Lakshmi Baskey, Shaim Sharon Lakra, Anupama Purty, Paridhi Kindo, Dr. Narendra Singh, Dr. Ajay Kumar
Department of Commerce
St. Xavier's College, Ranchi

***Abstract* – Employee engagement is vital for organisational productivity in today's competitive environment. This study examines the relationship between employee engagement and productivity at MECON limited, Ranchi, a public sector engineering consequently. It analyses how leadership, recognition, communication, motivation, and work culture influence employee performance and organisational growth. Most prior studies focused on private manufacturing and retail sectors, while limited research exists for PSUs like MECON limited. Earlier work also studied single engagement factors with narrow practical implications. The study aims to assess the engagement productivity link, evaluate the role of recognition, and understand leadership's impact on engagement. A descriptive and quantitative design was used. Primary data was collected from 106 employees through structured questionnaire, and secondary data from Journals, company reports and previous studies. Hypothesis testing was done using SPSS and regression analysis. The significance value was p = 0.05, which is ≤ 0.05, making results statistically significant. Hence, the null hypothesis (H_0) was rejected and the alternative (H_0) hypothesis accepted. Findings reveal that higher employee engagement significantly improves productivity, job satisfaction, teamwork, and organisational performance. Supportive leadership, timely recognition, training, transparent communication, and digital HR initiatives boost motivation and commitment. Conversely, high workload, limited growth opportunities and communication gaps lower engagement levels. The study concludes that effective leadership, consist recognition, skill training, and a supportive work culture are essential to enhance productivity and satisfaction at MECON Limited future research can explore digital HRM practises, hybrid work, and cross sector comparisons.**

Keywords - **Employee Engagement, Productivity, Leadership, Job satisfaction, HRM, Public Sectors.**

I. INTRODUCTION

1. Background of the study

In today's competitive business environment, employee engagement becomes an important factor in affecting the organisation's productivity and performance. Employee engagement is a key factor in determining the organisation's performance that influences the productivity, retention and innovation. The organisation's performance not only depends on technical skills but also on how employees are emotionally and physically committed to their work and workplace. When the employee feels motivated and feels valued, their performance improves and also involves them in decision-making that promotes organisational growth. Engaged employees contribute more effectively in their work, show greater responsibility, use their time, skills and resources to improve overall productivity and achieve the desired outcomes Therefore, employee engagement is defined as the emotional, cognitive, and physical commitment and efforts towards their task to enhance organisational productivity.

For a Company like Mecon Ltd., Ranchi, understanding employee engagement is especially important because it focuses on increasing the workforce's productivity, technology and infrastructure through various engagement strategies such as leadership support, workplace environment, recognition and job satisfaction. The engagement practices in Mecon Ltd. shape daily operations and strategic outcomes that influence daily operations and results. It examines job satisfaction, retention and modern manufacturing practices in India and connects to measurable outcomes across various teams and departments.

2. Statement of the problem

Employee engagement is a complex concept that is influenced by many personal and organisational factors such as gender, age, experience and responsibility that affect levels of engagement among employees and productivity. Internal factors such as managerial support, leadership, work environment, job role and organisational culture play an important role in shaping the levels of engagement. But maintaining high levels of engagement can be challenging for the organisation, which may impact overall performance. Today, employees not only expect a high salary but also look for career growth, self-development and a meaningful working environment. These expectations enhance the performance of workers and make them feel more engaged. The workplace environment also changed due to modern technologies, and organisations need to focus on those factors that encourage employees to stay engaged and motivated within the organisation. In Mecon Ltd., employee performance is essential in maintaining quality and project goals, but due to negative factors such as heavy workload, strict deadlines and management style can affect

engagement. When employee engagement is low, it can reduce productivity, which causes delays in completing projects, increases absenteeism and results in higher employee turnover. In such an organisation, it is difficult to measure productivity because it does not depend on how much work is done, but also depends on the quality of work and how efficiently tasks are completed through engaged employees. Therefore, the main problem is to understand how employee engagement affects productivity in public-sector organisations like Mecon Ltd. and identify the factors that influence employee engagement.

3. Significance of the study

The significance of this study lies in the concept of employee engagement in recent years, especially within public sector and knowledge-driven organizations. This study examines the impact of employee engagement on organizational productivity in terms of quality of work, project and employee retention in Mecon Ltd., Ranchi. Since it works in a consultancy and project-based environment, where employees' skills and teamwork are important, it helps employees understand the engagement for achieving better results. Moreover, this study is important from both academic and a practical point of view. In a consultancy firm like Mecon Ltd., employees' skills, teamwork and creativity directly influence engagement. Therefore, this study helps to find the gaps and gives suggestions to improve employee engagement and overall performance.

4. Scope of the study

The scope of the study focuses on the relationship between employee engagement and productivity in Mecon Ltd., Ranchi. It aims to understand how the level of engagement, motivation, commitment and satisfaction influences performance in a public-sector organization. This study examines how different factors, such as leadership, work environment, recognition, reward, job satisfaction, training and development, contribute to the higher productivity, quality of work and better retention of employees.

The study is limited to employees working in Mecon Ltd., Ranchi, and therefore, findings are based on the experiences, opinions, views and responses of employees regarding engagement at the workplace. The study uses a case study approach and gathers data through surveys from different departments of employees to understand the engagement practices within the company. The study also explores practical challenges such as turnover, workload pressure and low motivation. By identifying these issues, research provides useful suggestions and strategies to the management in improving the performance and productivity of employees efficiently. The research mainly covers the public and project-based organization, where productivity is not only measured by the quantity of output but also by the quality of work, teamwork, timely project completion and employee satisfaction. Therefore, the scope of the study is both practical and theoretical, making it valuable for researchers, scholars, and managers.

II. LITERATURE REVIEW

1. Iqbal et al. (2024) title "*Impact of Employee Engagement on Organizational Productivity"* research paper mainly focuses on the relationship between employee engagement and organizational performance, focusing on communication, development, and rewards. The main objectives applied the quantitative where one hundred employees from various departments were asked to participate in the surveys. The results obtained from the connection between EE and Performance is quite weak.

2. Celestin et al. (2024) title "*Enhance Employee Satisfaction and Engagement to Boost Productivity.* The paper focused on the impact on business performance and employee satisfaction. The main objective of this research is employee involvement and its impact on performance, which may lead to success. The results found that leadership styles, recognition, and work-life balance.

3. Verma et al. (2025) title *"Boosting Employee Engagement for Enhanced Productivity in Organizations".* The paper mainly focuses on various strategies used by organization to improve their levels of employee engagement in order to increase productivity. The objectives of the paper were to analyze the importance of engagement, which includes leadership styles, culture, rewards, and growth opportunities. They also add that this technology, particularly AI-based, can result in well- being performance of employees.

4. Atif and Sherwani (2025) *title "Remote Work and Impact on Employee Engagement and Productivity.* This paper focuses on expanding the collection of writings on which this research relies on the VOS software, along with the 969 database publications. The objectives of the study analysis emerged as a clear picture of today's research as well as future research opportunities. Research may investigate new dimension alternative hypotheses.

5. Adri Yanto (2023), *title "Evaluation of Employee Engagement level in improving Productivity".* The paper mainly focuses on how improvement shapes both personal and group results. The main objectives offer evidence-based recommendations, working better, keeping staff longer, and helping things last. Future research emphasizes long-term study of various technological changes and changing generational tastes.

6. Handayani et al. (2026) *title "Work Motivation and Employee Engagement in a Digital Work Environment".*

This paper is focusing of digital technologies have changed the organization function and relate to their employees. The objectives of the study the main mediator between motivation and performance. Results show how guiding terms in digital settings adopt quick links between drives and the digital work environment.

7. Kumar et al. (2025) *title "The Influence of Emotional Intelligence on Employee Engagement and Productivity".* This research paper focuses on the association between EI and job performance. The objectives of the study consider the importance of self- awareness, self- regulation, motivation, empathy, and social skills in increasing employee engagement.

8. Manurung et al. (2021) *title "Employee Engagement in SMEs"* paper mainly focuses on the main drivers of employee engagement in SMEs and the impact of the performance of the organization. The main objectives of the study were developed to help SMSs enhance the level of employee performance. The results show that engaged in leadership style, communication, culture, rewards, and employee well-being.

9. Makinde et al. (2018) *title "The Effect of Employee Engagement and Educational Qualification on Employee Productivity".* The paper has focused on identifying the relationship between employee engagement and education level on productivity. They found that the research results show that the engagement of employees and education level are very important to the productivity of employees in the industry.

10. Fitri et al. (2023) *title "Enhancing employee engagement productivity through technology system AI-based approaches".* The paper focuses on providing information about how AI can be used to improve employee productivity. The results obtained from this study indicate that there is an effect of employee skills on employee productivity, and that developed human resources readiness has an effect on employee productivity.

11. Byrne (2013), title *"Employee engagement and productivity" A literature review:* focus on the employee's emotions to the connection and commitment to their job and the organization. It includes the willingness of the basis type of responsibility to help them achieve their organizational goals. Employees was engagement is not a formal agreement or transaction; it involves employees' behaviours, emotions, and the relationship between the employs a there the organization.

12. Motyka (2018) title *"Employee's engagement and productivity" literature review* shows a strong positive relationship between the employee's engagement and other types of performance, such as individual productivity, team outputs and the organization's success. It also found that employees' engagement has a direct impact and positive impact on organizational performance at both the individual level and the organizational level. Employees have focused on efficiency and *put in* their extra efforts to reduces there the low work quality.

13. Sun and Bunchapattanasakda (2019) title ***"****Employees' engagement and the combination of emotional work behaviours, involvement in work and the cognitive work".* It improves both individual work, like motivational work, and commitment work. Employees have to focus on being involved there the work to contribute to the organizational goals to increase there the ultimate productivity and efficiency.

14. Bagus and Satata (2021) title *"Employee's engagement and productivity" A literature review: is a psychological condition.* The emotional condition that improves work performance directly. Employee engagement is focused on productive organisational goals to their aligned it emphasizes that employee engagement is a psychological approach to motivate employees to perform better.

15. Lestari (2025), title *"Employee engagement and productivity" A literature review: has to increase there the productivity in industries, especially in the modern environment and the digital environment.* It improves both quantitative performance and qualitative types of performance. It becomes the employee's engagement and the modern and digital work environment, while maintaining higher productivity.

16. Nursyidah (2023), title *"Employee engagement and productivity "A literature review: Enhance the organizational performance*. Through that, the factors of job satisfaction, employee motivation and organizational commitment. The major role of employees' engagement beyond the assigned task. It improves that the productivity, job satisfaction and other types of motivation. To engage the employee's engagement beyond the assigned there are roles to contribute extra efforts towards the organizational success of their job satisfaction or motivation.

17. Shuck and Willard (2009) title *"Employee and productivity "literature review: the history of the article helps to understand the concept of the development of time.* Both academic and practical definitions of employee engagement start with the earliest to the most recent. The historical review of the highlights of inconsistencies differs from the interpretation. The author has to suggest this using an integrated approach involving the definition of both past and present time of ideas it helps the

researcher and the practices to develop the understand and apply for a effective situations.

18. Hayes et. al. (2022) title *"Employee engagement and productivity "literature review: strongly to business outcomes such as productivity, satisfaction, profitability, and customer satisfaction.* It shows that the organizations with the highly employees' engagement perform better than the low engagement.

19. Bakker and Demerouti (2008) titled *"Employee engagement and productivity: A literature review, using the job demands of the resources of the model".* It suggests that when the employee has to suggest sufficient resources of tools, autonomy and support, they become engaged to increase their energy efficiency and productivity.

20. Lepine and Crawford (2010) titled "*Employee engagement and productivity: A literature review: Direct influences on the performance of the job".* It includes that engaged employees have to invest more efforts of this work, leading to higher productivity and to their better results. To support the direct relationship between employee engagement and job performance. It invests the cognitive work, the physical work, and the emotional energy into the work, which leads to superior performance of fewer employees engaged.

21. Kular et al. (2008) titled "*Employee Engagement: A Literature Review*" focus on employee engagement, job involvement, and conceptualizing the term employee engagement. The objectives of the study are to examine the relationship between individual differences and employee engagement.. The results show that engaged people are more productive, loyal, and efficient, whereas most people were disengaged.

22. Chandani et al. (2016) titled "*Employee Engagement: Review Paper on Affecting Employee Engagement"* paper mainly focuses on the performance and retention of employees in an organization. The main objective of the paper was to analyze the importance of performance and retention in an organization. The review-based research was used to collect the primary and secondary data for this study. The results show that engagement differs because of individuals' personalities, gender, religion, and job roles

23. Shridevi and Markos (2010) titled "*Employee engagement: The key to improving Performance"* paper, the main focus of the study is on job satisfaction and job commitment of employees. The objective of the study was to identify the factors influencing employee engagement. The results of the findings were that the organizational performance is measured by employee engagement. It shows how the relationship between an employee and an organization should be

24. Macey and Schneider (2008) titled *"The meaning of Employee Engagement paper",* the focus of this study was on behavioral engagement and trait engagement. The objective of this study was to differentiate among engagement, job satisfaction, and commitment. The findings were that factors like leadership communication and recognition were important in an organization. The organizations should focus more on leadership and communication.

25. Little and Little (2006) titled *"Employee Engagement: Conceptual Issues"* focus on work attitudes and employee behavior in an organization. The main objective of the study to look into the conceptual meaning of employee engagement. Extensive literature reviews were used to collect the data. The findings were that there are an inconsistency and interpretation in various studies where found.

26. Jaman et al. (2022) titled *" Impacts of Employee Engagement and Workforce Productivity on Retail Companies",* the paper focused on workforce engagement and business productivity. The main objective of the study was to examine the strategies used by retailers in the business environment. The findings that the concepts, such as professional development, balance collaborations, have emerged. It was also found out that traditional leadership stay a crucial role in enhancing engagement.

27. Alshammari (2015) paper titled *"Workforce Productivity through Employee Workforce Engagement: A Review"* focuses on reward, recognition, and work information environment. The objective of this study was to examine the influence of various variables in engagement. The findings were based on an analysis of past literature reviews and studies. It was concluded that employees are motivated and more engaged in their organization.

28. Zondo (2020) paper titled *"The Influence of Employee Engagement on Labor Productivity in an Automobile Assembly Organization in South Africa"* focuses on Absenteeism and productivity in an organization. The objective of the study is to examine the influence of engagement and global productivity. It was found that engagement can improve labor productivity.

29. Mehta and Mehta (2013) article, "*Employee Engagement: A Literature Review",* was mainly on employees, leadership, and engagement. The objective is to study the basic concept of employee engagement. Data were from journals, magazines, and newspapers for primary and secondary data. It was found out that

leadership, communication, and work culture play a significant role. It was concluded that engagement is a multidimensional concept.

30. Ghuman et al. (2015) titled *"Exploring the Impact of Flexible Work Arrangements on Employee Engagement in Telecommunications: Case Study of Egypt "paper* focuses on flexible work arrangements and job engagement. The objectives of the study are to analyze the impacts of flexible work arrangements on engagement. A descriptive-analytical approach was used to find data for the research paper. It was found that FWAs positively impact engagement.

2. Research Gap

The existing literature review provides valuable insight into employee engagement and its role in improving the organization's performance. However, there are still some gaps that remain in the public sector's initial studies, where practitioner-driven, hands-on experience and illustrative which lack strong factual confirmation. Existing research is mainly based on the correlation between engagement and productivity, but the causal relationship remains underdeveloped and neglected. Most of these studies are industry-specific and geographically restricted, which reduces the relevance and applicability of the data. There is quantitative research on employee engagement in MECON Limited, Ranchi; existing research has not well enough to examine how engagement influences productivity in engineering and consultancy units. The role of organization culture, leadership style, and HR practices in driving engagement within public sector units remains underexplored. Moreover, the primary use of a cross-sectional research design creates a lack of long-term understanding of engagement over time. Filling these gaps will help in a better understanding of employee engagement and productivity in organization like MECON Limited.

3. Research Questions

Some of the research questions are given below:

- How to study the relationship between productivity and employee engagement in MECON Limited?
- How to study the role of recognition in enhancing employee engagement?
- How to assess the impact of leadership and productivity on employee engagement?

4. Objectives of the study

- To study the relationship between productivity and employee engagement in MECON LTD.
- To study the role of recognition enhancing employee's engagement.
- To assess the impact of leadership and productivity in the employee's engagement.

5. Hypothesis of the study

- Ho (Null Hypothesis): There is no significant impact of leadership and productivity in employee engagement.
- H1 (Alternative Hypothesis): There is significantly impact of leadership and productivity in employee engagement

III. RESEARCH METHODOLOGY

This chapter provides details of research methodology to explore employee engagement and productivity within the public sector. It is a systematic process for collecting, analysing, and interpreting data to solve a research problem.

This chapter discussed how research is conducted, including research design, sources of data, study area, target population, sample size, techniques, and data collection procedures. The main purpose of this is to ensure that the findings of the study are accurate.

This study uses descriptive and quantitative methods to analyse the employee engagement at MECON.LTD. for a study on employee engagement and productivity. Research methodology helps in identifying the key factors that impact engagement. Research designs are based on descriptive, exploratory, experimental and correlational types. For this study of employee engagement and their productivity and exercise at MECON Limited, Ranchi, in India, using quantitative and descriptive methods.

For this study, both the primary data and secondary data are fully engaged. Through the primary data, information and data are collected through surveys, questionnaires, and observation. Likewise, the secondary data, including the ideas and preferences, gives the existing data, such as census, organisational records, journals, and market reports. The area is based on the Ranchi district of MECON. LTD. Was focuses on the organization environment, including various departments such as employee infrastructure, work culture, etc. The main areas are the geographical study area, organizational study area, and operational study area.

The target population for this study includes regular employees at MECON Limited, Ranchi. Main focused on Assistant General Managers, Managers, and staff from the Human Resources departments and Finance departments at the Ranchi headquarters. The total sample size of this study is 106 respondents was chosen to conduct this research. The techniques are used on the entire cluster. The techniques are profitability sampling and non-profitability sampling.

The research instruments through which the tools that are used to collect, measure, and analyse data for the research

International Journal for Novel Research in Economics , Finance and Management
www.ijnrefm.com
ISSN:3048-7722
Volume 4, Issue 5, Sep-Oct-2026, PP: 01-10

include questionnaires that have two forms: structured and unstructured. The variables of the study are:

- Dependent variable – Leadership and Productivity
- Independent variable - Employee Engagement

The procedure of the data collection used a quantitative research design. Data were collected from the primary sources through questionnaires. The study targeted 100th respondents or employees those are selected using the convenience sampling process, and data was collected through a Google form online, as well as offline. The researcher visited the MECON Ltd. Premises and distributed questionnaires to the employees. Participants were informed about the purpose of the study, and their consent was obtained. In this study, the identities of participants were kept confidential, and the data that is given by the respondents were used only for the study purpose. The data collection was conducted during the month of April 2026.

In hypothesis testing, we analyse that in the null hypothesis, there is no relationship between Productivity, Leadership and Employee Engagement. But in the alternative, there is a significant relationship. In this research, the researcher uses the ANOVA, which indicates that the model is significant (F=93.577, P=0.000), ($p<0.05$), which means that the Productivity and Leadership together have a significant effect on Employee Engagement, and the model is valid for further interpretation and hypothesis testing.

Regression df = Number of predictors

Residual df = Total number of observations (n) – Number of parameters estimated (p)

MS = SS/DF

F = MSR/MSE

In this study, the researcher also used the data analysis tools, which is used to analyse the collected data using Regression Analysis and SPSS (Statistical Package for the Social Sciences)**. Regression analysis** is a statistical tool used to understand the relationship between variables. It also shows how the dependent variables change when one or more independent variables change. It tells that if the β_1 is equal to 0.45, it means that when productivity increases by 1 unit, employee engagement increases by 0.45 units, holding leadership constant. **SPSS** is a widely used software for the statistical analysis of data in research. It allows a quick and accurate interpretation of large datasets. It works on organising, analysing and interpreting data through statistical techniques such as correlation, regression and descriptive statistics. It is particularly useful for transforming raw data into meaningful insights, with characteristics like automated calculations and graphical data presentation. **ANOVA** (Analysis of Variance) is a statistical method used to determine whether there are statistically significant differences between the means of three or more independent groups. Its components are SS, SSR, SSE, DF, MS, and the value of F, p-value. **Regression analysis coefficients** are unstandardized coefficients (B), standardised coefficients (Beta), standard Error (SE), T- value(T), and importance (p-value or significance).

IV. DATA ANALYSIS

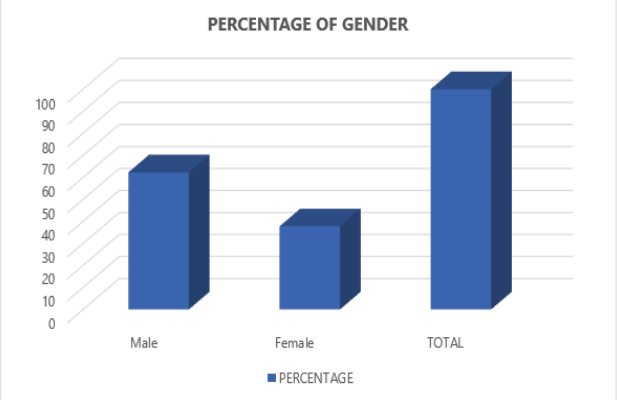


Fig 1: Percentage of Gender Distributions.

Interpretation – This interpretation shows that the male respondents are 62.26% and the female respondents are 37.73%.

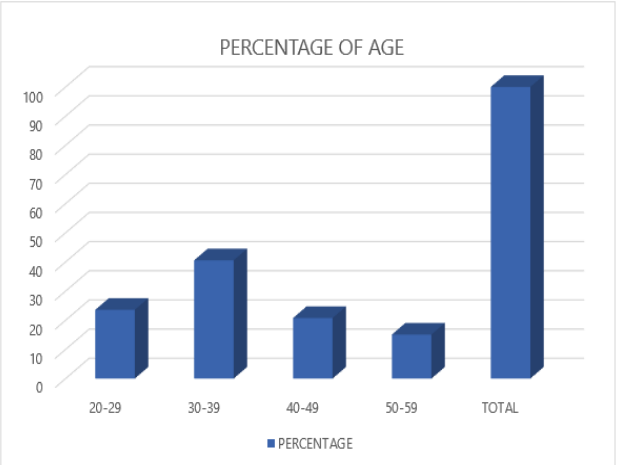


Figure 2: Percentage of Employees' Age.

Interpretation: The data shows the age-wise classification of 106 employees in the largest category of employees (40.56) falls under the age group of 30-39, representing that most of the workforce is of mid-career age experts.

International Journal for Novel Research in Economics , Finance and Management
www.ijnrefm.com
ISSN:3048-7722
Volume 4, Issue 5, Sep-Oct-2026, PP: 01-10

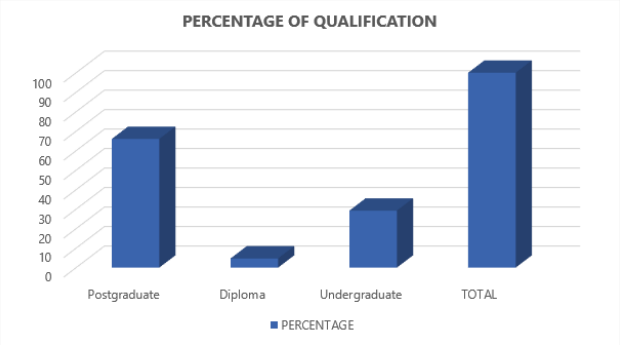


Figure 3: Percentage of Educational Qualification of Employees.

Interpretation: The data on the educational qualifications of employees at MECON Ltd., Ranchi, indicate that the majority are postgraduate (66.03%), reflecting a highly educated workforce.

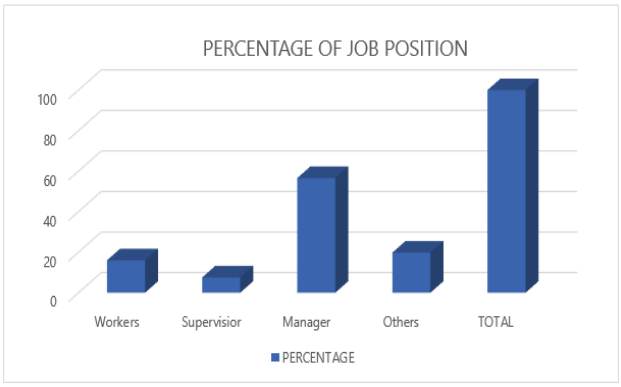


Figure 4: Percentage of Job Positions of Employees.

Interpretation: Out of a total of 106 respondents, the majority (56.6%) are managers, which indicates that more than half of the sample consists of employees with higher-level positions and decision-making roles.

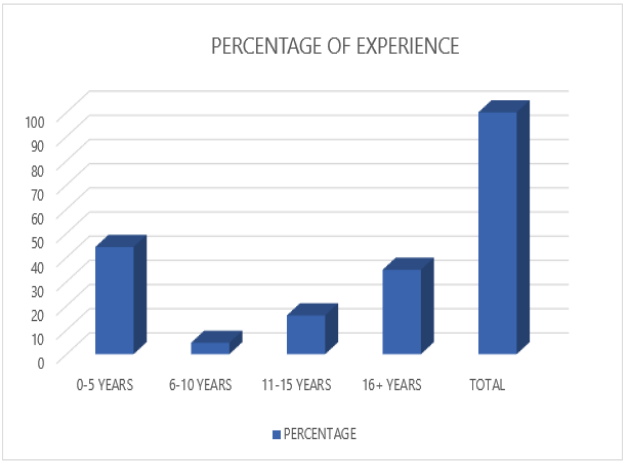


Figure 5: Percentage of Job Experience of an employee.

Interpretation: According to the data presented, the majority of job experience is of between 0-5 years with the frequency of 47 and percentage of 44.33 that shows the highly experience in an organisation.

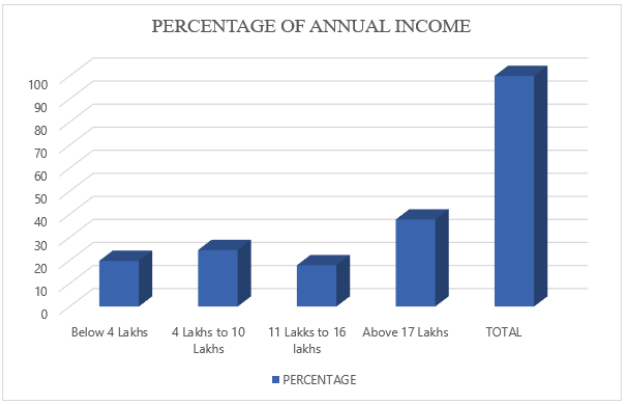


Figure 6: Percentage of Employees' Annual Income.

Interpretation: The data has to show that the distribution of responses is based on the annual income. The total number of people is 106. The largest group earns 37.73% above the 17 lakhs, belonging to the higher rate of the annual income category.

2. Hypothesis Testing

1. Regression result and ANOVA

Variables Entered/Removed[a]			
Model	Variables Entered	Variables Removed	Method
1	P, L[b]	.	Enter
a. Dependent Variable: EE			
b. All requested variables entered.			

P.L. – Productivity and Leadership

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.803[a]	.645	.638	.62932
a. Predictors: (Constant), P, L				

Interpretation

The value 0.803 indicates an absolute strong linear relationship. R^2 indicates the percentage of differences in the dependent variable that can be justified by the independent variable. A value of 0.638 specifies that even after adjusting for several variable (P,L),therefore 63.8% of the variation in EE is still justified. The (SEE) indicates the value 0.629 means that an on average, the predicted EE values differ from actual values by about 0.63 units.

International Journal for Novel Research in Economics , Finance and Management
www.ijnrefm.com
ISSN:3048-7722
Volume 4, Issue 5, Sep-Oct-2026, PP: 01-10

ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.121	2	37.061	93.577	.000[b]
	Residual	40.793	103	.396		
	Total	114.914	105			
a. Dependent Variable: EE						
b. Predictors: (Constant), P, L						

Interpretation

The (SS) value of 74.121 shows that a large section of variation in Employee Engagement is justified by Productivity and Leadership, and the Residual value 40.793 shows that some of the variation is not explained by the model. It includes errors and other factors. The total sum of squares indicates the overall variability in Employee Engagement levels in the dataset. F- value of 93.577 indicates that the model is strong. Independent variables significantly explain the dependent variable. The Significance Value (Sig.= 0.000) indicates the result is highly significant. We reject the null hypothesis.

Coefficients

Regression Results: Dependent Variable = Employee Engagement (EE)

Predictors: Leadership (L), Productivity (P) | SPSS v26 | n=106 | MECON Ltd., Ranchi

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.921	.247		3.731	.000
	L	.534	.083	.618	6.445	.000
	P`	.241	.105	.220	2.294	.024

Dependent Variable: EE

Interpretation: Both predictors are statistically significant at $p < 0.05$. Leadership ($\beta = 0.618$, $p < 0.001$) is the strongest predictor of Employee Engagement, followed by Productivity ($\beta = 0.220$, $p = 0.024$). Results indicate that leadership has a greater direct impact on EE than Productivity in MECON Ltd.

Note: $p < 0.05$ confirms statistical significance. Beta values show the relative strength of predictors.

Objective Achieved

The ANOVA results confirm that the model is statistically significant. The findings suggest that engaged employee are more motivated, committed, and efficient in performing their tasks and duties, which ultimately contribute to organizational growth and improved performance. This means that the relationship between employee engagement and productivity is not due to chance but creates a meaningful impact in the context of MECON Limited. Therefore, it can be concluded that the objective of studying the relationship between employee engagement and productivity has been successfully achieved. The finding confirms that higher employee engagement leads to improved morale and better productivity levels in MECON Limited, Ranchi. The findings also indicate that effective communication by leadership plays an important role in enhancing employee engagement and productivity in Macon Limited. Thus, the objective was achieved as the study confirmed that an energetic and positive leadership style helps in creating a supportive and productive work environment in MECON Limited, Ranchi.

IV. CONCLUSION

Findings

Demographics

62.26% male, 40.56% aged 30-39 years, 66.03% postgraduates, 56.6% in managerial roles. Skilled, mid-career workforce with 37.73% earning>17 lakhs.

Engagement&Productivity Perception

65.1% employees agree that engagement improves productivity & morale, overall positive perception; minimal strong disagreement

Statistical Results (N = 106)

Strong positive correlation between Leadership, Engagement, and Productivity. $R^2 = 0.645$ Model explains 64.5% Leadership (beta = 0.618) = strongest Productivity (beta = 0.22) = significant variance in engagement, $F = 93.577$ $p < 0.05$ Model statistically significant predictor of engagement but weaker effect on engagement, HO rejected: Employee engagement significantly impacts productivity

Core Insight

Leadership drives engagement, which drives productivity in MECON Ltd.

Conclusion

The study concludes that employee engagement is a critical driver of productivity at MECON Ltd., Ranchi, with leadership emerging as the strongest predictor of engagement. Statistical analysis shows the model explains 64.5% of the variance in engagement, confirming a significant positive relationship between engagement and organizational performance. Engaged employees contribute to higher productivity, improved team

performance, reduced turnover, and greater profitability. To sustain long-term growth, MECON Ltd. Should prioritise leadership development, implement tailored recognition programs, and foster a supportive work environment that reinforces both engagement and productivity.

Suggestion

Based on the findings, MECON Ltd. Should strengthen the link between performance and engagement by integrating formal recognition programs into its appraisal system. Leadership quality must be enhanced through targeted training in communication and motivation, as it is the strongest driver of engagement. The company should invest in skill development tied to clear career paths, promote work-life balance policies, and establish transparent two-way feedback mechanisms using pulse surveys. Further, engagement impact should be tracked through KPIs like project time and turnover, while open communication and digital HR tools can improve transparency, trust, and long-term productivity.

Future Scope

- Longitudinal analysis – Future studies can track engagement and productivity trends over 3-5 years after digital HR policy implementation at MECON.
- Technology impact – Research can examine how SAP/ERP tools influence techno-stress, digital well-being, and employee engagement.
- Hybrid work models – Studies may assess the effect of flexible work policies in PSUs on engagement and project performance.
- Al&automation readiness – Future work can evaluate how Al adoption in design and project management impacts productivity.

REFERENCE

1. Iqbal, T., & Mahmood, I. (2024). Impact of employee engagement on Organizational Productivity. *The Critical Review of Social Science Studies, 2(2), 127-146.*
2. Celestin, M., Vasuki, M., Sujatha, S., & Kumar, A.D (2024). Enhancing employee satisfaction and engagement to boost productivity. The role of leadership, culture, and recognition programs. *International Journal of Computational Research and Development, 9(2). 67-74*
3. Verma, V.K., Srinivas, M., Pandey, K. K., & Dargan, H. (2024). Boosting Employee Engagement for Enhanced Productivity in Organizations. *A Strategic Approach Frontiers in Health Information, 13(3).*
4. Arif, M.A., & Sherwani, N.U.K. (2025). Remote work and its impact on employee engagement and productivity: A bibliometric analysis. *ICTACT Journal on Management Studies, 11(2), 2116-2123.*
5. Adriyanto, A. (2023). Evaluation of employee engagement level in improving productivity and retention in the company. *Atestasi: Journal Immiah Akuntansi. 6(1). 583-598.*
6. Handayani, N., Febriyanti, S., & Pradana, M. S. (2026). Work Motivation and Employee Engagement in Digital Work Environments: A Systematic Literature Review. *Journal IImiah Manajemen Kestuan, 14(1), 141-152.*
7. Kumar, P. A., Vaishnavi, M., Sinduja, R., Nithya, D., Sripriya, V., & Jaishree, S. (2025). The Influence of Emotional Intelligence on Employee Engagement and Productivity. *Advances in Consumer Research, 2, 86-93.*
8. Sangapan, L. H., Manurung, A.H., Manurung, C., Manurung, A., & Manurung, G. (2021). Employee Engagement in SMEs: A systematic review of the literature on factors and their impact. *Journal of Law, Politic and Humanities, 1 (4), 195-202.*
9. Makinde, O.G., Tayo, F.O.,&Olaniyan, T.S. (2018). The effect of employee engagement and educational qualification on employee productivity in Nigerian banking industry. *IOSR Journal of Business and Management, 20(9), 9-17.*
10. Fitri, D., Ratnasari, S. L., & Sultan, Z. (2023, November). Enhancing employee productivity through technology system AI- based approaches. In Proceeding of the International Seminar on Business Economics, Social Science and Technology (ISBEST) (Vol. 3, No.1).
11. O'Byrne, L. M., Witherspoon, J., Verhage, R. J., O'Brien, M., Muldoon, C., Ryan, C., ... & Reynolds, J. V. (2020). Barrett's Registry Collaboration of academic centers in Ireland reveals high progression rate of low-grade dysplasia and low risk from nondysplastic Barrett's esophagus: report of the RIBBON network. *Diseases of the Esophagus*, *33*(10), doaa009.
12. Motyka, B. (2018). Employee engagement and performance: a systematic literature review. *International Journal of Management and Economics*, *54*(3), 227-244.
13. Sun, L., & Bunchapattanasakda, C. (2019). Employee engagement: A literature review. *International Journal of Human Resource Studies*, *9*(1), 63-80.
14. Satata, D. B. M. (2021). The Effect of Organizational Learning toward Work Readiness. *Ejournal UMM*, 1194-1488.
15. Safutri, L. W., Humairah, E., Maulida, I., Lestari, E. A., & Sari, C. K. (2025). Research Trends for DigitalBased Civic Education Learning on Scopus Data-Based Period 2004-2025: Bibliometric Analysis. *Journal of Mathematics Instruction, Social Research and Opinion*, *4*(3), 749-766.
16. Mariana, M., Firdaus, A., Arifai, M., Diana, D., Nursyidah, N., & Indah, Y. (2025, December). The

Role of Environmental and Social Accounting in Public Sector Sustainable Finance. In *Proceedings of the 2nd International Conference of Economics, Management, Accounting, and Business Digital (ICEMAB 2025)* (pp. 61-67).

17. Schuck, M., & Wollard, K. (2013). A historical perspective of employee engagement: An emerging definition.
18. Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of applied psychology*, *87*(2), 268.
19. Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career development international*, *13*(3), 209-223.
20. Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. *Journal of applied psychology*, *95*(5), 834.
21. Kular, S., Gatenby, M., Rees, C., Soane, E.,&Truss, K. (2008). Employee engagement: A literature review. *Kingston University*, *19*, 1-28.
22. Chandani, A., Mehta, M., Mall, A.,&Khokhar, V. (2016). Employee engagement: A review paper on factors affecting employee engagement. *Indian Journal of Science and Technology*, *9*(15), 1-7.
23. Markos, S.,&Sridevi, M. S. (2010). Employee engagement: The key to improving performance. *International journal of business and management*, *5*(12), 89.
24. Macey, W. H.,&Schneider, B. (2008). The meaning of employee engagement. *Industrial and organizational Psychology*, *1*(1), 3-30.
25. Little, B.,&Little, P. (2006). Employee engagement: Conceptual issues. *Journal of Organizational Culture, Communications and Conflict*, *10*(1), 111-120.
26. Jaman, S. H., James, K. C.,&Luamba, D. S. (2022). Impacts of employee engagement and workforce productivity on retail companies. *International Journal of Business and Management Research*, *10*(1), 6-18.
27. Alshammari, H. (2015). Workplace productivity through employee workforce engagement: A review study. *International Journal of Business and Social Science*, *6*(12), 156-160.
28. Zondo, R. W. (2020). The influence of employee engagement on labour productivity in an automotive assembly organisation in South Africa. South African Journal of Economic and Management Sciences, 23(1), 1-9.
29. Mehta, D.,&Mehta, N. K. (2013). Employee engagement: A literature review. *Economia. Seria Management*, *16*(2), 208-215.
30. Ghonim, A., Awad, A., Shemais, M., Shma, T.,&Aziz, A. (2025). Exploring the impact of flexible work arrangements on employee engagement in telecommunications: case of Egypt. *Problems and Perspectives in Management*, *23*(2), 198