© APR 2026 | IRE Journals | Volume 9 Issue 10 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I10-1716702

Employees' Engagement, Innovative Practices and Performance

ROSELYN P. PACLEJAN[1], ANELYN A. JANABAN, DM[2]
[1]*A Doctor of Management Major in Business, Administration Dissertation, Guimaras State University, Buenavista, Guimaras, Philippines*
[2]*Adviser*

Abstract - This study examined employees' engagement, innovative practices, and performance in manufacturing firms across the five congressional districts in the Province of Iloilo for the year 2025. Employees were selected through stratified random sampling to ensure fair representation. A researcher-made questionnaire adopted from various relevant literature, validated using Good and Scates criteria and pilot-tested for reliability, served as the primary instrument. Data were analyzed using frequency, percentage, mean, t-test, ANOVA, and Pearson's r in SPSS at a 0.05 alpha level. Findings revealed that employees demonstrated high engagement, regularly practiced innovative behaviors, and consistently delivered outstanding performance. Engagement was most evident in confidence in leadership, belief in mission and values, and organizational pride. Innovation was reflected in sustainability advocacy, knowledge-sharing, and digital communication, while performance was highlighted by ethical standards, effective communication, and goal-setting. Differences in engagement were not significant across demographics, while innovative practices varied by position and tenure, and performance differed only by position. Correlation analysis confirmed significant relationships among engagement, innovation, and performance, underscoring their interconnected role in workplace success. Conclusions indicated that Iloilo's manufacturing workforce was largely composed of older employees and high school graduates, distributed across managerial, supervisory, and rank-and-file roles. Employees consistently showed dedication, creativity, and professionalism, with leaders and newer employees displaying stronger innovation and performance. Recommendations encouraged stakeholders to strengthen leadership development, workforce training, sustainability advocacy, and collaboration to sustain competitiveness in Iloilo's manufacturing sector.

Keywords: Employees' Engagement, Innovative Practices, and Performance

I. INTRODUCTION

Background of the Study

Manufacturing firms remain central to the Philippine economy, driving growth through contributions to GDP, capital accumulation, economies of scale, and technological advancement (Asian Development Bank, 2019). Equally important are employee engagement, innovation, and performance, which sustain organizational success and competitiveness.

Employee engagement reflects commitment, motivation, and identification with one's work, leading to higher performance and well-being (Chartered Institute of Personnel and Development, 2021). Innovation fosters engagement by promoting ownership, autonomy, and belonging (Ghani et al., 2023). It encompasses new or improved processes, products, services, or business models that create value for organizations and society (Heidenreich et al., 2019). Performance, meanwhile, refers to behaviors and outcomes aligned with organizational objectives (Dalton et al., 2020).

In the Philippine manufacturing sector, Dio and Cabrestante (2025) found that "Driving Change with Innovation" strongly predicts employee engagement, underscoring the need for firms to lead with innovation rather than rely solely on engagement. Similarly, Shkurti and Mustafa (2024) note that engaged employees spur innovation, challenge norms, and drive growth. Across the industry, engagement and innovation enhance productivity, quality, and safety, while advanced technologies and continuous improvement boost efficiency (Manufacturing Institute, 2020).

Despite global and national evidence on the importance of employee engagement, innovation, and performance, localized research in the Philippine context particularly in Iloilo's manufacturing sector remains scarce. This study addresses that gap by examining their interrelationships to guide business owners, managers, and policymakers in

strengthening practices that ensure productivity, sustainability, and long-term growth.

Statement of the Problem

This study determined the employees' engagement, innovative practices and performance in manufacturing firms in the Province of Iloilo, Philippines for the Year 2025.

Specifically, this study sought to answer the following questions:

1. What is the profile of the respondents in terms of age, educational attainment, position, length of service, and district?
2. What is the level of employees' engagement in manufacturing firms when taken as a whole and when classified according to age, educational attainment, position, length of service, and district?
3. What are the employees' innovative practices in manufacturing firms when taken as a whole and when classified according to age, educational attainment, position, length of service, and district?
4. What is the employees' performance in manufacturing firms when taken as a whole and when classified according to age, educational attainment, position, length of service, and district?
5. Are there significant differences in the level of employees' engagement in manufacturing firms when classified according to age, educational attainment, position, length of service, and district?
6. Are there significant differences in employees' innovative practices in manufacturing firms when classified according to age, educational attainment, position, length of service, and district?
7. Are there significant differences in employees' performance in manufacturing firms when classified according to age, educational attainment, position, length of service, and district?
8. Are there significant relationships among employees' engagement, innovative practices and performance in the province of Iloilo?

Hypotheses:

Based on the questions stated above, these hypotheses were advanced.

1. There are no significant differences in the level of employees' engagement in manufacturing firms when classified according to age, educational attainment, position, length of service, and district.
2. There are no significant differences in employees' innovative practices in manufacturing firms when classified according to age, educational attainment, position, length of service, and district.
3. There are no significant differences in employees' performance in manufacturing firms when classified according to age, educational attainment, position, length of service, and district.
4. There are no significant relationships among employees' engagement, innovative practices and performance in the province of Iloilo.

Theoretical Framework

To examine employee engagement, innovative practices, and performance in manufacturing firms, the study was guided by three interrelated theoretical foundations.

For employee engagement, the study was anchored on Self-Determination Theory by Deci and Ryan (1985; updated 2020). This theory explains that employees are most engaged when their basic psychological needs for autonomy, competence, and relatedness are fulfilled. When workers feel empowered to make decisions, capable in their roles, and connected to colleagues, they demonstrate higher enthusiasm and commitment.

Self-Determination Theory was crucial to this study as it helped explain how manufacturing firms can foster intrinsic motivation, sustain employee engagement, and strengthen organizational loyalty.

For innovative practices, the study was guided by Resource-Based Theory by Barney (1991; revisited by Kunc & O'Brien, 2019). This theory posits that organizations achieve competitive advantage by leveraging valuable, rare, inimitable, and non-substitutable resources. Employee creativity and innovation are considered strategic resources that drive organizational success.

Resource-Based Theory helped explain how manufacturing firms can harness employee knowledge and innovative practices to improve processes, enhance product quality, and maintain competitiveness in dynamic markets.

For employee performance, the study applied Goal-Setting Theory by Locke and Latham (1990). This theory emphasizes that specific, challenging, and attainable goals lead to higher performance outcomes. Clear goals enhance focus, motivation, and persistence, while feedback strengthens continuous improvement. Goal-Setting Theory supported the idea that manufacturing firms can improve productivity and efficiency by aligning employee goals with organizational objectives and providing regular performance feedback.

Together, these theories provided a comprehensive framework for analyzing how engagement, innovation, and performance interact in manufacturing firms. They offered valuable insights into how organizations can build a motivated, innovative, and high-performing workforce to achieve sustained growth and competitiveness.

Conceptual Framework

The aim of this study was to explain the relationship among variables using the conceptual framework presented in Figure 1. The independent variables included the respondents' demographic profile specifically age, educational attainment, position, length of service, and business location, while the dependent variables were employee engagement, innovative practices, and performance.

In terms of age, respondents were classified as "40 years old and below" and "41 years old and above." Younger employees were presumed to focus more on innovation, productivity, and performance improvement, while older employees were expected to value job security, stability, and opportunities for mentorship. It was assumed that older employees, having longer tenure and deeper industry knowledge, may demonstrate stronger engagement, while younger employees contribute fresh perspectives to innovative practices.

In terms of educational attainment, respondents were grouped as "high school graduates," "college graduates," and "postgraduate degree holders." It was presumed that individuals with higher educational qualifications were more likely to adopt new technologies, demonstrate stronger engagement, and achieve higher performance outcomes. Educational attainment was therefore expected to influence organizational competitiveness and innovation in manufacturing firms.

In terms of position, employees were categorized as "rank-and-file," "supervisory," or "managerial." Managerial and supervisory staff were believed to experience higher levels of engagement and innovation due to their accountability and broader responsibilities, while rank-and-file employees may have limited opportunities for involvement. Recognizing the role of position was essential to understanding how engagement and performance vary across organizational levels.

In terms of length of service, employees were classified into three categories: "5 years and below," "6 to 10 years," and "11 years and above." Those with longer tenure were presumed to demonstrate higher engagement, stronger performance, and more positive assessments of innovative practices compared to newer employees. Tenured staff were also expected to mentor newer employees, thereby fostering engagement, innovation, and improved performance across the workforce.

In terms of district, respondents were employed in manufacturing firms across Iloilo Province's congressional districts. It was assumed that employees in firms located in more developed districts may experience greater engagement, innovation, and performance due to better access to resources and opportunities.

Lastly, the researcher posited that employee engagement, innovative practices, and performance are positively interconnected. When employees are highly engaged and empowered to innovate, they tend to perform better, which enhances organizational productivity and competitiveness. This dynamic revealed how demographic factors could either strengthen or limit employee outcomes in manufacturing firms.

These concepts are illustrated in Figure 1.

© APR 2026 | IRE Journals | Volume 9 Issue 10 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I10-1716702

RESEARCH PARADIGM

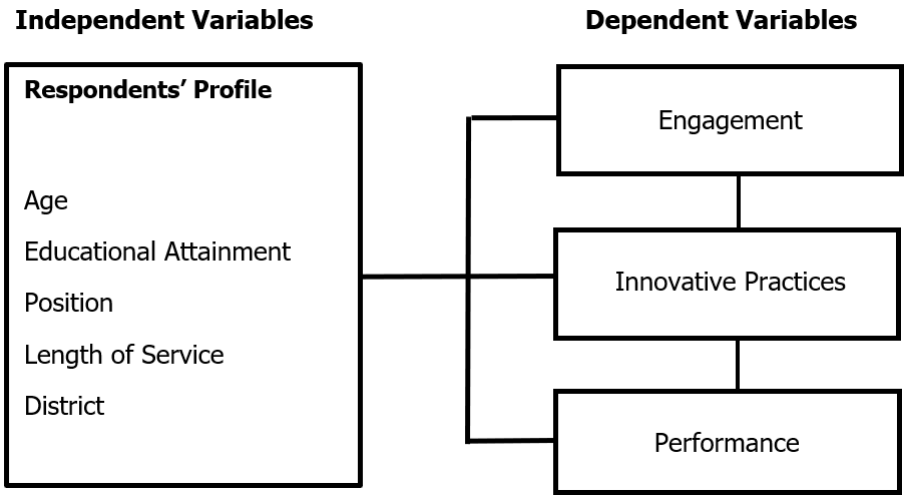

Figure 1. *Schematic Diagram Showing the Relationship between the Independent and the Dependent Variables of the Study*

Significance of the Study

The findings of this study hold substantial significance for various stakeholders, including Department of Trade and Industry (DTI) officials, Local Government Unit (LGU) officials, business owners/managers, employees, customers, the researcher, and future researchers.

Department of Trade and Industry (DTI) Officials. The results provide DTI officials with actionable data to identify challenges faced by manufacturing firms across Iloilo's five congressional districts. These insights can guide the development of targeted support programs, strengthen industry competitiveness, and inform policy interventions that promote sustainable growth in the manufacturing sector.

Local Government Unit (LGU) Officials. For LGU officials, the findings can serve as a basis for creating policies, development plans, and training programs that enhance employee engagement, innovative practices, and performance. The study also offers guidance for formulating ordinances and organizational strategies that support career development and professional growth among employees in manufacturing firms.

Business Owners and Managers. The study provides business leaders with valuable information to identify new market opportunities, understand customer needs, and assess competition. These insights can help them develop unique selling propositions, foster innovation through new technologies and business models, and gain a competitive edge in both local and global markets.

Employees. For employees, the study highlights areas for improvement in engagement, innovation, and performance. By applying the recommendations, workers can enhance their professional growth, contribute to organizational success, and deliver higher-quality services that benefit both their firms and the wider community.

Customers. As end-users of manufacturing products, customers stand to benefit from improved innovation and performance. The study emphasizes the importance of listening to the "voice of the customer," which can lead to better products, enhanced customer experiences, and stronger relationships between firms and their clients.

Researcher. The study contributes to the researcher's understanding of the dynamics of employee engagement, innovation, and performance in Iloilo's manufacturing firms. The knowledge gained supports the development of evidence-based recommendations that can be applied to improve organizational efficiency and competitiveness.

Future Researchers. This study provides a reliable baseline for future investigations. Subsequent researchers may use its findings as reference material for exploring related topics or examining new variables not included in this study. It lays the groundwork for continued inquiry into workforce development, organizational innovation, and performance in the manufacturing sector.

Definition of Terms

The following terms are defined conceptually and operationally to ensure clear understanding of the study.

Employees' Engagement. employee engagement refers to the emotional, cognitive, and behavioral state of being fully involved and committed to one's work. Engaged employees are motivated, proactive, and willing to exert effort to achieve organizational goals (Harter et al., 2002).

In this study, employee engagement referred to the active participation of respondents in manufacturing firms across the Province of Iloilo for the year 2025. Engagement was measured using a five-point Likert scale: 5 – Strongly Agree, 4 – Agree, 3 – Uncertain, 2 – Disagree, 1 – Strongly Disagree.

Innovative Practices. innovative practices are defined as new or improved processes, products, services, or business models that create value for organizations and society (Heidenreich et al., 2019).

In this study, innovative practices referred to the adoption and implementation of new ideas, processes, or services that enhance organizational performance and effectiveness in manufacturing firms in the province of Iloilo for the year 2025 . Respondents rated their innovative practices using a five-point Likert scale: 5 – Strongly Agree, 4 – Agree, 3 – Uncertain, 2 – Disagree, 1 – Strongly Disagree.

Performance. performance is defined as the set of behaviors or outcomes that are relevant to an organization's goals and objectives (Dalton et al., 2020).

In this study, performance referred to the ability of employees to meet standards of productivity, quality, and efficiency in manufacturing firms operating in the Province of Iloilo for the year 2025. Employee performance was assessed using a five-point Likert scale: 5 – Strongly Agree, 4 – Agree, 3 – Uncertain, 2 – Disagree, 1 – Strongly Disagree.

Scope and Limitations of the Study

This study focused on assessing the levels of employee engagement, innovative practices, and performance among personnel employed in manufacturing firms in the Province of Iloilo, Philippines, for the year 2025. The respondents were drawn from manufacturing firms located across the province's five congressional districts: 1st, 2nd, 3rd, 4th, and 5th. They were selected through stratified random sampling to ensure fair representation of employees from different firms and districts.

A researcher-made questionnaire, developed based on relevant literature, served as the primary data-gathering instrument. The questionnaire consisted of four parts: Part I gathered the personal profile of the respondents; Part II measured the level of employee engagement; Part III assessed innovative practices; and Part IV evaluated employee performance. The instrument was validated using the Good and Scates criteria and subjected to reliability testing. To establish reliability, the questionnaire was pilot-tested on a group of employees from selected manufacturing firms in Iloilo.

Data were collected, tabulated, and analyzed using appropriate statistical tools, including frequency count, percentage, mean, independent samples t-test, one-way ANOVA, and Pearson's correlation coefficient. All statistical computations were performed using the Statistical Package for the Social Sciences (SPSS) software, with a margin of error set at the 0.05 alpha level.

Limitations of the study included its geographic coverage, which was confined to manufacturing firms within the Province of Iloilo, and its respondent pool, which excluded firms outside the five congressional districts. The findings were also limited to the assessment of employees during the year 2025 and may not reflect changes over time or in different organizational contexts.

II. REVIEW OF RELATED LITERATURE AND STUDIES

This part presents significant highlights of the review of related literature and other publications that are parallel to this research. The information, concepts

and ideas are taken from news articles, abstract, and journals from both local and foreign sources and the interactive media.

Conceptual Literature

On Employees' Engagement

Employee engagement has become a critical foundation of organizational success, particularly in manufacturing companies where efficiency, innovation, and competitiveness depend on a committed workforce. In this context, employee engagement is defined as the emotional, cognitive, and behavioral state of being fully involved and dedicated to one's work. It reflects enthusiasm, dedication, and absorption in tasks, encouraging employees to contribute discretionary effort beyond formal job requirements (Schaufeli et al., 2002). Smith (2022) highlights that employee engagement drives organizational success, showing that structured human resource interventions designed to strengthen engagement led to measurable improvements in both business performance and employee satisfaction.

According to Faupel et al. (2019), highly engaged teams contribute to a 35% higher innovation rate, which is critical in addressing challenges brought by globalization, digitalization, demographic shifts, and rising performance expectations. Engagement is therefore seen as a strategic pillar for competitive advantage, as engaged employees are passionate about their work, committed to organizational goals, and willing to exert effort to achieve success (Eldor et al., 2020; Turner, 2020; Issa et al., 2022).

Despite its importance, employee engagement remains a construct with conceptual gaps. Kossyva et al. (2022) note the lack of a universally accepted definition, with terms such as work engagement and organizational engagement often used interchangeably.

Employee engagement has also been linked to organizational change and innovation. Busari et al. (2020) found that engaged employees significantly influence organizational transformation, while Budriene and Diskiene (2020) observed that higher engagement levels lead to improved organizational outcomes. Gichohi (2014) further contends that engagement is a precursor to creativity and innovation, with Social Exchange Theory (Paillé, 2019; Wang, 2022) providing a theoretical foundation. This theory posits that employees reciprocate organizational support such as rewards, fairness, and respect-through engaged behaviors, which in turn foster innovation and improved performance.

Employee engagement is also shaped by workplace conditions such as competitive compensation, inclusive environments, and continuous development opportunities (Sun, 2019). Nupta (2016) describes engagement as an integration of behavioral components commitment, involvement, attachment, energy, and psychological presence that transform employee potential into performance, ultimately driving organizational success.

On Employees' Innovative Practices

Innovative practices play a crucial role in strengthening organizational success, particularly in manufacturing firms where competitiveness and sustainability depend on continuous improvement. They involve the development or enhancement of processes, products, services, or organizational methods that generate value for both the company and society (Heidenreich et al., 2019). Such practices are marked by creativity, adaptability, and the ability to transform ideas into practical applications that improve performance. When employees are encouraged to innovate, they become more engaged and invested in their organizations, as innovation fosters ownership, autonomy, and a sense of belonging (Ghani et al., 2023). From the perspective of Social Exchange Theory, innovative work behavior can be understood as a reciprocal response by employees to organizational support. Firms that demonstrate strong commitment to sustainability, human resource management, leadership, culture, and empowerment create conditions where employees perceive innovation as a fair exchange, thereby contributing positively to organizational growth (Paillé, 2019; Wang, 2022).

Employee engagement plays a critical role in driving innovation. Pedraza et al. (2016) emphasize that innovative behavior is typified by sentiments of duty, autonomy, and responsibility. Employees who are highly engaged demonstrate constructive work conduct that goes beyond conventional standards, showing strong mental, emotional, and physical

attachment to their jobs. This attachment fosters collaboration, constructive criticism, and opportunities to engage in innovation (Gulzar & Mehraj, 2018). Dixit and Upadhyay (2021) further argue that innovative work practices and employee engagement are directly related, with job autonomy serving as a critical driver of creative work practices.

Organizations also influence innovation through structural and embedding approaches. Knox and Marin-Cadavid (2022) identify structural approaches such as rearranging organizational procedures and allocating resources to facilitate engagement, while embedding approaches shape employees' perceptions of innovation efforts. Organizations that restructure work routines and provide flexibility, materials, and competencies enable employees to innovate effectively. Conversely, highly structured environments with limited autonomy hinder employee participation and innovation (Werner, 2020).

Innovation is increasingly recognized for its economic and strategic value. Gavurova et al. (2021) highlight that innovative practices contribute significantly to organizational competitiveness. Mehale et al. (2021) and Ming (2023) stress the importance of coaching and skill development to enhance employees' innovative capacities, while Papa (2020) underscores the role of knowledge accumulation and retention in strengthening innovation frameworks within manufacturing firms.

Ren et al. (2021) define employee innovation performance as the pursuit of good work values, creative output, and effective behavior, while Ogbonnaya and Messersmith (2019) emphasize that employees' knowledge and skills capacity directly influence their ability to innovate and perform well.

Recent studies also show that innovation is closely tied to employee engagement and organizational performance. Dio and Cabrestante (2025), in a Philippine manufacturing context, found that "Driving Change with Innovation" significantly predicted employee engagement, suggesting that firms must proactively lead with an innovative mindset rather than assuming engagement alone will foster innovation. Similarly, Shkurti and Mustafa (2024) argue that engaged employees are more likely to spur innovation, challenge conventional practices, and support organizational growth.

Finally, technological and human-centric strategies are critical for sustaining innovation. Cui (2025) highlights that combining advanced technologies with robust organizational learning processes enhances innovation capacity and job performance. Hessari et al. (2023) caution that technostress can impede innovative behavior, but promoting individual innovation serves as a buffer against its negative effects. Gindert and Müller (2024) emphasize the transformative role of innovation teams, which generate higher-quality ideas, increase diversity of thought, and improve efficiency in problem-solving and product development.

On Employee's Performance

Employee performance is a central factor in organizational success, particularly in manufacturing firms where competitiveness and growth depend on the consistent contribution of the workforce. It is commonly described as the set of behaviors and outcomes that directly support the achievement of organizational goals and objectives (Dalton et al., 2020). Strong performance reflects employees' ability to apply their knowledge, skills, and motivation effectively, ensuring productivity, efficiency, and quality results. Within the manufacturing sector, performance is widely acknowledged as a key determinant of success, driving innovation, operational excellence, and long-term sustainability (Rahadian, 2020; Kaur, 2025).

Workplace environment has been shown to significantly impact employee satisfaction and performance. Positive environments boost motivation, engagement, and commitment, leading to improved job performance, creativity, teamwork, and reduced absenteeism (Front. Public Health, 2022). Goal-setting strategies also play a vital role in enhancing performance. Specific, challenging goals improve individual behaviors and motivate employees to work effectively, whereas generalized objectives are less successful. Hard goals, when achievable, lead to excellent performance outcomes.

Training is consistently highlighted as a vital factor in enhancing employee performance. Targeted training accelerates the learning process, yielding immediate improvements in knowledge, skills, and abilities that directly impact job-related tasks. As employees master new skills, they become more

invested in achieving company goals, demonstrating increased motivation, engagement, and teamwork. Training also reinforces organizational values, mission, and vision, ensuring an aligned and focused workforce. Effective training programs cultivate deeper employee commitment, improve leadership capacity, and ultimately generate higher returns on investment for the firm (Front. Public Health, 2022; Balanev et al., 2022; Fan et al., 2023).

Performance is often classified into five elements: planning, monitoring, developing, rating, and rewarding. Planning involves setting goals and strategies; monitoring provides continuous feedback and accountability; developing addresses deficiencies in performance; rating summarizes employee achievements for comparison; and rewarding recognizes contributions to sustain motivation. These elements collectively ensure that employees remain focused, motivated, and capable of meeting organizational standards (Front. Public Health, 2022).

Recent empirical studies define employee performance as a multifaceted construct shaped by recognition, leadership, engagement, and innovation. Suseno et al. (2021) and Chatterjee (2024) examined performance through entrepreneurial development and competency-based compensation, highlighting the transformative impact of recognizing individual efforts on job satisfaction and benchmark achievement. Chen and Wei (2020) emphasized leadership's role in cultivating symbiotic relationships between managers and employees, while Sharma (2021) noted that performance is influenced by engagement, innovation, motivation, and career development opportunities. Van Zyl et al. (2021) further defined work engagement as a driver of innovative work behaviors, which act as mediators in improving task performance.

The AMO Theory provides a theoretical definition of employee performance, positing that high performance depends on three key elements: ability, motivation, and opportunity (Yu, 2020; Iftikar, 2022; Al-Swidi, 2021). Ability refers to the skills and competencies employees bring to their roles. Motivation is driven by performance appraisal and compensation programs, both financial and non-financial (Yu, 2020). Opportunity consists of practices related to employee involvement, knowledge sharing, and autonomy-enhancing initiatives that promote participation in activities aimed at improving overall organizational performance (Al-Swidi, 2021).

Training is also defined as a systematic intervention to bridge performance gaps. Needs assessments and performance analyses identify deficiencies, while customized programs such as workshops, mentoring, and e-learning address these gaps. Continuous evaluation and feedback ensure training effectiveness, boosting employee confidence, job satisfaction, and organizational competitiveness (Front. Public Health, 2022).

Employee performance is further influenced by environmental factors such as corporate culture, organizational structure, job design, appraisal systems, and group dynamics. These elements can hinder training effectiveness if not addressed. Studies highlight that high levels of employee commitment are achieved when training meets learning objectives and improves performance at both individual and organizational levels (Machuki & Kwendo, 2023).

Thus, employee performance is understood as a multidimensional construct shaped by workplace environment, training, leadership, motivation, and organizational support. It involves not only the quality and quantity of output but also employee consistency, innovation, and commitment, all of which collectively sustain organizational success and competitiveness.

Related Studies

Foreign Studies

Research across different countries highlights how employee engagement, innovative practices, and performance interact to shape the competitiveness of manufacturing firms. In Pakistan, Ullah (2021) demonstrated that knowledge sharing enhances innovation performance, with employee commitment mediating the relationship. The study emphasized that recognition, career development, and inclusive culture strengthen commitment and sustain innovation. Similarly, Adeneji et al. (2018) in Nigeria found that organizational change positively influences employee performance, particularly when employees perceive autonomy in their roles.

In China, Wei and Nan (2020) showed that higher levels of employee engagement led to stronger

innovation outcomes, especially in patent quality, supported by skilled employee retention, positive media attention, and improved R&D efficiency. A study in Thailand (2021) revealed that self-efficacy fosters organizational citizenship behavior, with engagement, commitment, and job satisfaction mediating the link, ultimately enhancing team performance. In Saudi Arabia, Alateeg (2024) highlighted how employee involvement and leadership drive innovation in small manufacturing firms, noting that digital transformation combined with innovative behaviors improves quality outcomes and supports national economic diversification.

Finally, Martdianty (2020) in Indonesia applied Job Embeddedness theory to manufacturing SMEs, showing that employee retention is shaped more by emotional ties and cultural values than financial considerations. The findings suggest that informal management styles and limited resources influence how employees remain attached to their jobs.

Together, these studies illustrate that across diverse manufacturing contexts, employee engagement, innovative practices, and performance are deeply interconnected. Commitment, autonomy, leadership, and workplace culture consistently emerge as critical factors that enable firms to adapt, innovate, and sustain competitiveness in a rapidly changing global environment.

Local Studies

Recent research in the Philippine and regional contexts highlights the interplay of employee engagement, innovation, and performance across different industries, including manufacturing. Dio and Cabrestante (2025) examined leadership competencies as predictors of employee engagement, finding that driving change through innovation significantly fostered commitment and performance. Similarly, Melchor (2024) assessed HRM practices in Oriental Mindoro retail establishments, showing that recruitment, training, and performance-based compensation strongly influence employee productivity and retention.

In the manufacturing sector, Ichdan (2024) analyzed Kaizen culture, motivation, and work discipline, revealing that these factors enhance employee performance, with productivity acting as a mediator. Torino et al. (2024) emphasized that engaged employees in Cotabato department stores demonstrate higher dedication and success, though excessive workloads can hinder outcomes. Deepalakshmi et al. (2024) further reinforced that engagement directly impacts productivity, innovation, and financial results, with organizational size and industry context moderating the relationship.

Innovation-focused studies also provide valuable insights. Maskudi et al. (2024) highlighted how psychological contracts and knowledge sharing strengthen innovation performance in green manufacturing industries, while Tambago (2020) explored innovation adoption in government-assisted food manufacturing firms, noting gaps between managerial and employee perceptions of innovativeness. Finally, Ludmilla and Mustafa (2024) examined enterprises in Albania and Kosovo, finding a strong positive correlation between employee engagement, innovation, and business success, underscoring the role of engaged employees in driving organizational growth.

Together, these local and regional studies demonstrate that leadership, HRM practices, workplace culture, and innovation adoption are critical in shaping employee engagement and performance. They also highlight the importance of fostering innovative practices to sustain competitiveness and growth in manufacturing firms.

Relevance of the Related Literature and Studies

The conceptual literature and previous studies reviewed in this research are highly relevant and aligned with the present investigation, as they emphasize employees' engagement, innovative practices, and performance. These themes were explored through the works of Dalton and Rahadian (2020), Kaur and Antoaneta (2023), Suseno and Chatterjee (2021, 2024), Chen and Sharma (2020, 2021), Yu and Al-Swidi (2020, 2021), and Van Zyl and Patel (2021, 2022). These studies provided foundational insights into how workplace environment, training, leadership, and motivation influence employee outcomes, serving as guides for the present research.

The reviewed literature offered essential perspectives and empirical data that informed the study's conceptual framework and methodological approach. These works helped identify key variables such as workplace environment, training, leadership

competencies, and innovation culture, and how these relate to employee satisfaction, motivation, and organizational performance.

In summary, conceptual studies by Dalton and Kaur (2020, 2025) emphasized the role of supportive environments and enriched job roles in enhancing employee engagement and performance. Foreign studies by Ullah and Alateeg (2021, 2024), Adeneji and Wei (2018, 2020), and Torino and Deepalakshmi (2024) highlighted how knowledge sharing, leadership, change management, and engagement practices affect performance and innovation across different cultural and institutional contexts, offering valuable comparative insights for the Philippine setting.

Local studies by Dio and Cabrestante (2025), Melchor and Ichdan (2024), Maskudi and Tambago (2020, 2024), and Ludmilla and Mustafa (2024) identified the importance of leadership competencies, HRM practices, Kaizen culture, and innovation adoption in shaping employee engagement and performance. These findings contributed meaningful perspectives to the present research, revealing both commonalities and contextual differences in how performance and innovation are fostered within Philippine organizations.

Ultimately, this body of literature provided a strong foundation that enabled the researcher to refine the research problem, strengthen the analytical framework, and ensure that the investigation into employee engagement, innovative practices, and performance was grounded in credible and contextually relevant scholarship.

III. METHODOLOGY

This section includes and discusses the research design, respondents of the study, reliability testing, validity of the instrument, data gathering instrument, data gathering procedure and statistical tools to be used.

Research Design

This study aimed to determine the level of employees' engagement, innovative practices, and performance in manufacturing firms operating in the Province of Iloilo. A quantitative method of research was employed, utilizing a descriptive-correlational research design. This approach was selected to systematically describe the current conditions and examined the relationships among the variables without manipulating them. Stratified random sampling was used to gather data from employees across five congressional districts in the province of Iloilo.

According to Trochim (2006), survey research involves the use of questionnaires and statistical surveys to collect data about people's thoughts and behaviors. As Leedy and Ormrod (2001) explain, correlational studies explore relationships among variables, showing the extent to which human characteristics or behaviors are associated with one another. Cherry (2022) further notes that correlational studies are non-experimental, meaning researchers do not manipulate variables but instead observe natural associations.

The main objective of descriptive-correlational studies is to depict individuals, events, or conditions as they naturally exist and to identify meaningful relationships among them. In this study, data were gathered, described, and analyzed to generate insights into how employee engagement, innovative practices, and performance interact within manufacturing firms.

This research design was appropriate for the study, as it allowed the researcher to observe and analyze existing conditions in Iloilo's manufacturing sector, providing a comprehensive understanding of how organizational practices and employee behaviors contribute to innovation and performance outcomes.

Respondents of the Study

The respondents of the study were 385 employees from manufacturing firms across the five congressional districts of the Province of Iloilo, namely the 1st, 2nd, 3rd, 4th, and 5th districts. The study sought to determine the level of employees' engagement, innovative practices, and performance within these firms.

To ensure proportional representation from each district, respondents were selected using stratified random sampling, based on official workforce data provided by the participating manufacturing firms. This sampling method ensured a balanced and representative cross-section of the provincial manufacturing workforce.

© APR 2026 | IRE Journals | Volume 9 Issue 10 | ISSN: 2456-8880
DOI: https://doi.org/10.64388/IREV9I10-1716702

The distribution of respondents was presented in Table 1.

Table 1. Distribution of Respondents

Congressional District	N	n	%
1st	318	12	3.12
2nd	5755	217	56.36
3rd	1193	45	11.69
4th	2573	97	25.19
5th	371	14	3.64
Total	10210	385	100%

Data Gathering Instrument

The researcher utilized a structured questionnaire to gather data for the study. The instrument consisted of four parts. Part I collected the demographic profile and relevant information of the respondents, including age, educational attainment, position, length of service, and district. Part II obtained responses regarding the level of employee engagement. Part III captured responses on the level of employees' innovative practices. Part IV gathered responses on the level of employees' performance.

Parts II, III, and IV of the questionnaires were adopted from reviewed literature to suit the specific objectives and context of manufacturing firms in the Province of Iloilo. The items were carefully selected and modified to ensure relevance to the organizational setting.

Respondents were asked to answer the questionnaire using a five-point Likert scale. For employee engagement and innovative practices, the scale measured the extent to which these factors were experienced by the respondents. The scale included the following numerical weights and corresponding descriptions.

After the data gathering procedure was completed, the researcher studied, tabulated, and interpreted the data. Inferences were drawn based on the results, which provided insights into the relationships among employee engagement, innovative practices, and performance in manufacturing firms in the Province of Iloilo.

Scale of Means	Descriptive Rating	Interpretation
4.21 – 5.00	Very High	All employees showed strong dedication, enthusiasm, and commitment to their work and organizational goals.
3.41 – 4.20	High	Most employees showed strong dedication, enthusiasm, and commitment to their work and organizational goals.
2.61 – 3.40	Moderate	Some employees showed strong dedication, enthusiasm, and commitment to their work and organizational goals.
1.81 – 2.60	Low	Few employees showed strong dedication, enthusiasm, and commitment to their work and organizational goals.
1.00 – 1.80	Very Low	Very few employees showed strong dedication, enthusiasm, and commitment to their work and organizational goals.

Employees' Engagement

Scale of Means	Descriptive Rating	Interpretation
4.21 – 5.00	Most Practiced	All employees consistently demonstrated strong creativity, regularly generating new ideas and applying improved methods to enhance organizational outcomes.

3.41 – 4.20	Practiced	Most employees consistently demonstrated strong creativity, regularly generating new ideas and applying improved methods to enhance organizational outcomes.
2.61 – 3.40	Moderately Practiced	Some employees consistently demonstrated strong creativity, regularly generating new ideas and applying improved methods to enhance organizational outcomes.
1.81 – 2.60	Slightly Practiced	Few employees consistently demonstrated strong creativity, regularly generating new ideas and applying improved methods to enhance organizational outcomes.
1.00 – 1.80	Least Practiced	Very few employees consistently demonstrated strong creativity, regularly generating new ideas and applying improved methods to enhance organizational outcomes.

Employees' Performance

Scale of Means	Descriptive Rating	Interpretation
4.21 – 5.00	Outstanding	Employees consistently delivered excellent work quality, demonstrated high efficiency, and achieved organizational goals at an exceptional level.
3.41 – 4.20	Very Satisfactory	Employees showed strong performance, reliably meeting expectations and contributing positively to organizational success.
2.61 – 3.40	Satisfactory	Employees performed at an average level, fulfilling basic job requirements but with limited consistency and effectiveness.
1.81 – 2.60	Fair	Employees displayed low performance, often struggling to meet work standards and organizational expectations.
1.00 – 1.80	Poor	Employees demonstrated very low performance, showing minimal efficiency and failing to achieve work goals.

Validity of the Research Instrument

The improved researcher-made questionnaires were submitted for validation with the assistance of research experts, three from the manufacturing industry and two from the graduate school research panel. The Good and Scates Criteria for Validation was employed to evaluate whether the questions were appropriate, clear, reasonable, non-superficial, typical, and sufficiently inclusive, with an average score of 5.0. The questionnaire was carefully modified to suit the specific objectives of the study, drawing insights and structure from a review of various related literature. It was then reviewed and validated by a panel of jurors selected for their expertise in research methodology, testing and assessment, and the English language.

Validity refers to the appropriateness, meaningfulness, correctness, and usefulness of the inferences that a researcher makes (Frankel and Wallen, 2017). The comments, corrections, and suggestions of the validators regarding the items in the checklist were carefully considered and incorporated into the final draft of the research instrument before it was subjected to reliability testing.

Reliability of the Instrument

To determine the reliability of the questionnaire designed to measure Employees' Engagement, Innovative Practices, and Employees' Performance, the instrument was pilot-tested among 30 employees from manufacturing firms in the province of Guimaras. These individuals were not part of the actual survey population but shared similar demographic characteristics with the intended respondents. The pilot testing was conducted to refine the questionnaire for clarity, ease of completion, and accurate recording of responses during the actual data collection phase.

The data gathered from the pilot test were tallied and subjected to a reliability analysis using Cronbach's alpha. This statistical method evaluates the internal consistency of responses across a set of related items within each construct. A Cronbach's alpha coefficient of 0.80 or higher was considered acceptable, indicating that the items reliably measured the intended concept. According to Saunders, Lewis, and Thornhill (2019), alpha values range from 0 to 1, with higher values reflecting stronger internal consistency.

The reliability results of the instrument demonstrated high internal consistency across all three constructs. The Employees' Engagement scale yielded a Cronbach's alpha of 0.91, the Innovative Practices scale registered 0.90, and the Employees' Performance scale produced a coefficient of 0.91. These results confirm that the questionnaire was a reliable tool for assessing the key dimensions of the study.

Data Gathering Procedure

After the validity and reliability of the research instrument were established, the questionnaire was reproduced and prepared for distribution. The researcher employed three phases in conducting the study: the Pre-Investigation Phase, the Investigation Phase, and the Post-Investigation Phase.

In the Pre-Investigation Phase, the researcher obtained formal approval from the Dean of the Graduate School to administer the research instrument to the respondents. The researcher then visited the Local Government Units in the Province of Iloilo, composed of five congressional districts, and sought permission from the Business Permits and Licensing Offices to gather the list of manufacturing firms in their respective districts. Following this, the researcher secured approval from the business owners to conduct the study and include their employees as respondents, assuring them of the privacy and confidentiality of the information, which would be used solely for research purposes.

During the Investigation Phase, the researcher distributed the questionnaire to the selected respondents, providing clear instructions and explaining how each item should be answered to ensure accuracy of responses. The researcher also assured respondents that their answers would remain confidential and would be used exclusively for research purposes.

In the Post-Investigation Phase, the completed questionnaires were collected, collated, encoded, and tabulated. The data were then processed and interpreted using the Statistical Package for the Social Sciences (SPSS) software, with the assistance of a statistician from Guimaras State University.

Statistical Tools Used

The statistical tools used in this study include frequency count, percentage, mean, independent samples t-test, one-way ANOVA, and Pearson's correlation coefficient (r).

Frequency count was used to determine the distribution of respondents based on key demographic variables: age, educational attainment, position, length of service, and business location. This provided a clear profile of the manufacturing workforce involved in the study.

Percentage was applied to present the proportion of respondents within each demographic category, offering a comparative view of the sample composition.

Mean was computed for each item and interpreted using a predefined descriptive scale. To assess the general levels of employees' engagement, innovative practices, and performance, the mean scores were categorized according to qualitative descriptors such as Very High, High, Moderate, Low, and Very Low.

Independent samples t-test was employed to determine whether there were statistically significant differences in the levels of employees' engagement, innovative practices, and performance between groups with two categories, such as age. This test helped identify whether sex-based perceptions varied meaningfully across the measured constructs.

One-way Analysis of Variance (ANOVA) was used to assess significant differences among groups with more than two categories, such as educational attainment, position, and district. This analysis determined whether the mean scores for employees' engagement, innovative practices, and performance varied across different classifications of respondents.

Pearson's correlation coefficient (r) was utilized to measure the strength and direction of relationships among the three core variables: employees' engagement, innovative practices, and performance. This statistical tool provided insight into how these constructs were interrelated, indicating whether

higher levels of one variable were associated with increases or decreases in the others.

IV. RESULTS AND DISCUSSIONS

This part presents the results summary of the study, and discusssions of the conclusions drawn based on the findings, and the recommendations offered for future action and policy direction for the study on employees' engagement, innovative practices and performance.

Summary

This study determined the employees' engagement, innovative practices and performance in manufacturing firms in the Province of Iloilo, Philippines for the Year 2025.

Specifically, this study sought to answer the following questions:

1. What is the profile of the respondents in terms of age, educational attainment, position, length of service, and district?
2. What is the level of employees' engagement in manufacturing firms when taken as a whole and when classified according to age, educational attainment, position, length of service, and district?
3. What are the employees' innovative practices in manufacturing firms when taken as a whole and when classified according to age, educational attainment, position, length of service, and district?
4. What is the employees' performance in manufacturing firms when taken as a whole and when classified according to age, educational attainment, position, length of service, and district?
5. Are there significant differences in the level of employees' engagement in manufacturing firms when classified according to age, educational attainment, position, length of service, and district?
6. Are there significant differences in employees' innovative practices in manufacturing firms when classified according to age, educational attainment, position, length of service, and district?
7. Are there significant differences in employees' performance in manufacturing firms when classified according to age, educational attainment, position, length of service, and district?
8. Are there significant relationships among employees' engagement, innovative practices and performance in the province of Iloilo?

The respondents were personnel from manufacturing firms across Iloilo's five congressional districts, selected through stratified random sampling. The researcher-made instrument was validated using Good and Scates criteria, pilot-tested for reliability, and finalized with improvements. Data on engagement, innovation, and performance were analyzed using frequency, percentage, mean, t-test, ANOVA, and Pearson's r in SPSS at a 0.05 alpha level.

V. FINDINGS

1. The respondents of the study were 385 employees from manufacturing firms in the province of Iloilo. Most were aged 41 years and above (55.1%), while 44.9% were 40 years old and below. In terms of educational attainment, the majority were high school graduates (53.5%), followed by college graduates (40.0%) and postgraduate degree holders (6.5%). For position, 38.2% held managerial roles, 30.6% were supervisory, and 31.2% were rank-and-file employees. Regarding length of service, 34.0% had served for 6–10 years, 33.2% for 11 years and above, and 32.7% for 5 years and below. Geographically, most respondents came from the 2nd District (56.36%), followed by the 4th District (25.19%), 3rd District (11.69%), 5th District (3.64%), and 1st District (3.12%).
2. The overall level of employees' engagement in manufacturing firms in Iloilo was high (M = 4.20). The strongest indicators were confidence in leadership (M = 4.28, Very High), belief in mission and values (M = 4.22, Very High), and pride in the organization (M = 4.21, Very High). When classified to age, older employees (41 years and above) scored 4.21 (Very High) compared to 4.19 (High) for younger ones. Postgraduate employees scored 4.21 (Very High), college graduates 4.20 (High), and high school graduates 4.19 (High). By position, managerial employees scored 4.22 (Very High), supervisory 4.19 (High), and rank-and-file 4.18 (High). For length of service, those with 5 years and below scored 4.22 (Very High), while both 6–10 years and 11 years and above scored 4.19 (High). Across districts, the 2nd District had the highest score at 4.25 (Very High), followed by

the 1st (4.21, Very High), 5th (4.20, High), 3rd (4.19, High), and 4th (4.17, High).

3. The overall level of employees' innovative practices in manufacturing firms in Iloilo was rated Most Practiced (M = 4.21). The highest indicators were advocating for sustainable business practices (M = 4.27), sharing knowledge and staying updated (M = 4.25), and utilizing digital marketing and social media (M = 4.24). The lowest indicators included leveraging professional networks (M = 4.15), working effectively with cross-functional teams (M = 4.16), and using collaboration tools (M = 4.17). When classified, younger employees (40 years and below) scored 4.21 compared to 4.20 for older employees. Postgraduate respondents scored 4.23, college graduates 4.21, and high school graduates 4.18. By position, managerial and supervisory employees both scored 4.23, while rank-and-file employees scored 4.16. For length of service, those with 5 years and below scored the highest at 4.26, compared to 4.18 for 6–10 years and 4.19 for 11 years and above. Across districts, the 2nd District scored the highest at 4.26, followed by the 1st and 5th Districts (4.21), the 4th District (4.20), and the 3rd District (4.17).
4. The overall performance of employees in manufacturing firms in Iloilo was rated Outstanding (M = 4.22). The highest indicators were upholding ethical standards (M = 4.27), effective communication (M = 4.26), and clear goal-setting (M = 4.25), while the lowest were problem-solving (M = 4.18), time management (M = 4.16), and adaptability (M = 4.19), all rated Very Satisfactory. When classified, younger employees (40 years and below) scored 4.23 compared to 4.21 for older employees. By educational attainment, high school and college graduates both scored 4.22, while postgraduate employees scored 4.21. Managerial employees had the highest score at 4.26, followed by supervisory at 4.21, while rank-and-file scored 4.17. For length of service, those with 5 years and below scored 4.25, compared to 4.20 for 6–10 years and 4.21 for 11 years and above. Across districts, the 2nd District scored the highest at 4.28, followed by the 1st (4.22), 4th (4.21), 3rd (4.20), and 5th (4.18).
5. There were no significant differences in the level of employees' engagement when classified according to age, educational attainment, position, length of service, and district. Employees aged 40 years and below (M = 4.19) and 41 years and above (M = 4.21) showed comparable results (t = -0.751; p = 0.453). By educational attainment, high school graduates (M = 4.19), college graduates (M = 4.20), and postgraduate employees (M = 4.21) had similar scores (f = 0.126; p = 0.882). For position, managerial (M = 4.22), supervisory (M = 4.19), and rank-and-file employees (M = 4.18) reported no significant differences (f = 1.199; p = 0.303). In terms of length of service, employees with 5 years and below (M = 4.22), 6–10 years (M = 4.19), and 11 years and above (M = 4.19) also showed comparable engagement (f = 1.021; p = 0.361). Across districts, scores ranged from the 2nd District (M = 4.25) to the 4th District (M = 4.17), but differences were not significant (f = 1.601; p = 0.173).
6. There were no significant differences in employees' innovative practices when classified by age, educational attainment, and district, but significant differences were found when grouped by position and length of service. Employees aged 40 years and below (M = 4.21) and 41 years and above (M = 4.20) showed comparable results (t = 0.527; p = 0.598). By educational attainment, high school graduates (M = 4.18), college graduates (M = 4.21), and postgraduate employees (M = 4.23) reported similar scores (f = 1.545; p = 0.215). In terms of position, managerial (M = 4.23) and supervisory employees (M = 4.23) scored significantly higher than rank-and-file employees (M = 4.16) (f = 3.734; p = 0.025). For length of service, those with 5 years and below (M = 4.26) scored higher than employees with 6–10 years (M = 4.18) and 11 years and above (M = 4.19) (f = 4.322; p = 0.014). Across districts, scores ranged from the 2nd District (M = 4.26) to the 3rd District (M = 4.17), but differences were not significant (f = 1.450; p = 0.217).
7. There were no significant differences in employees' performance when classified by age, educational attainment, length of service, and district, but there was a significant difference when grouped by position. Employees aged 40 years and below (M = 4.23) and 41 years and above (M = 4.21) showed comparable results (t = 0.672; p = 0.502). By educational attainment, high school graduates (M = 4.22), college graduates (M = 4.22), and postgraduate

employees (M = 4.21) reported similar scores (f = 0.172; p = 0.842). For length of service, those with 5 years and below (M = 4.25), 6–10 years (M = 4.20), and 11 years and above (M = 4.21) also showed no significant differences (f = 1.814; p = 0.164). Across districts, scores ranged from the 2nd District (M = 4.28) to the 5th District (M = 4.18), but differences were not significant (f = 2.150; p = 0.074). However, by position, managerial employees (M = 4.26) scored significantly higher than supervisory (M = 4.21) and rank-and-file employees (M = 4.17) (f = 6.959; p = 0.001).

8. There were significant relationships among employees' engagement, innovative practices, and performance in manufacturing firms in Iloilo. Engagement and innovative practices showed a moderately strong correlation (r = 0.511; p = 0.000), innovative practices and performance had a moderately high correlation (r = 0.516; p = 0.000), and engagement and performance also demonstrated a substantial correlation (r = 0.481; p = 0.000).

VI. CONCLUSIONS

1. The respondent profile reflects a workforce in Iloilo manufacturing firms that is mostly older, largely composed of high school graduates, and spread across managerial, supervisory, and rank-and-file roles with varied tenure and representation across districts.
2. Most employees in manufacturing firms show strong dedication, enthusiasm, and commitment to their work and organizational goals, specifically in leadership, belief in mission and values, and pride in the organization.
3. All employees of manufacturing firms consistently demonstrate strong creativity, regularly generating new ideas and applying improved methods to enhance organizational outcomes, most evident in sustainability advocacy, knowledge-sharing, and digital communication.
4. Employees consistently deliver excellent work quality, demonstrate high efficiency, and achieve organizational goals at an exceptional level, with ethical standards, effective communication, and goal-setting as the strongest indicators.
5. Employees' engagement remains consistent across age, education, position, tenure, and district, showing a unified workforce with shared values and commitment.
6. Innovative practices vary by position and tenure, with managers, supervisors, and newer employees displaying stronger innovation than rank-and-file and longer-serving staff.
7. Performance differs only by position, as managerial employees outperform supervisory and rank-and-file staff, while age, education, tenure, and district show no significant variation.
8. Engagement, innovation, and performance are strongly connected, demonstrating that employees who are highly engaged and innovative consistently achieve better workplace outcomes.

VII. RECOMMENDATIONS

Drawing from the findings and conclusions, the following practical and appropriate recommendations may be offered to key stakeholders to strengthen employee engagement, innovation, and performance in manufacturing firms in the province of Iloilo:

1. Department of Trade and Industry (DTI) Officials may design programs that promote innovation and performance standards across manufacturing firms. These should include training for managers and supervisors to sustain strong innovative and performance practices, while also encouraging rank-and-file employees to adopt similar approaches.
2. Local Government Unit (LGU) Officials may support workforce development initiatives by providing resources for skills training, leadership development, and innovation workshops, thereby fostering a unified and highly engaged workforce across districts.
3. Business Owners and Managers may prioritize leadership development and mentorship programs. Recognizing that managerial roles often demonstrate stronger performance and innovation, they can use these strengths to uplift supervisors and rank-and-file employees.
4. Employees may actively engage in continuous learning, sustainability advocacy, and digital communication practices, while also enhancing collaboration, networking, and time management skills to improve workplace outcomes.
5. Customers may be involved through feedback mechanisms that encourage employees to refine their practices, reinforcing the strong link between engagement, innovation, and

performance in delivering quality products and services.

6. Researchers may disseminate the study's findings to industry leaders and policymakers through forums, reports, and academic publications, highlighting the importance of engagement and innovation in driving performance and competitiveness in manufacturing firms.
7. Future Researchers may explore additional factors such as organizational culture, leadership style, and technological adoption to deepen understanding of how engagement and innovation influence performance outcomes in the manufacturing sector.
8. All Stakeholders may foster a culture of continuous improvement by encouraging collaboration across positions, tenure groups, and districts, recognizing that engagement, innovation, and performance are interconnected drivers of manufacturing success.

REFERENCES

[1] Al Hamdan, Z. and Issa, H. B., 2022. The role of organizational support and self-efficacy on work engagement. Journal of Nursing Management, pp. 1–11.

[2] AlMazrouei, H. (2021). Empowerment leadership as a predictor of expatriates learning goal orientation and creative work involvement. International Journal of Organizational Analysis, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/IJOA-08- 2020-2366.

[3] Andika, R., & Darmanto, S. (2020). The effect of employee empowerment and intrinsic motivation on organizational commitment and employee performance. Jurnal Aplikasi Manajemen, 18(2), 241-251.

[4] Amah, O. E., (2020). Innovative Work Behaviors: Role of Employee Engagement & Organizational Citizenship Behavior. The Indian Journal of Industrial Relations, 56(2), pp. 356–173.

[5] Arnoff, J. (1971) Achievement Motivations Training and Executives advancement, Journal of Applied Science New York Vol. 7(1).

[6] Budriene, D. and Diskiene, D., 2020. Employee Engagement: Types, Levels and Relationship With Practice of Hrm. Malaysian E Commerce Journal, 4(2), pp. 42–47. https://doi.org/10.26480/mecj.02.2020.42.47

[7] Bakker, A. B. and Demerouti, E., 2008. Towards a model of work engagement. Career Development International, 13(3), pp. 209–223. https://doi.org/10.1108/13620430810870476

[8] Bowen, D.E. and Lawler, E.E. (1995), 'Empowering Service Employees', Sloan Management Review, 36(4): 73-84.

[9] Bakker, A. B., Albrecht, S. L. and Leiter, M. P., 2011. Work engagement: Further reflections on the state of play. European Journal of Work and Organizational Psychology, 20(1), pp. 74–88. https://doi.org/10.1080/1359432X.2010.546711

[10] Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120. https://doi.org/10.1177/014920639101700108

[11] Business Victoria. (2023). Improve employee innovation: Increase profitability and staff retention with an innovative culture. https://business.vic.gov.au/business-information/grow-your-business/improve-employee-innovation

[12] Chen, M. Despeisse, B. Johansson, (2020). Environmental sustainability of digitalization in manufacturing: a review Sustainability (Switzerland), pp. 1-33, 10.3390/su122410298

[13] Choi, S. L., Goh, C. F., Adam, M.B.H., & Tan, O. K. (2016). Transformational leadership, empowerment, and job satisfaction: The mediating role of employee empowerment. Human Resources for Health, 14(73), 1–14. https://doi. org/10.1186/s12960-016-0171-2

[14] Cui, J. (2025). The Explore of Knowledge Management Dynamic Capabilities, AI-Driven Knowledge Sharing, Knowledge-Based Organizational Support, and Organizational Learning on Job Performance: Evidence from Chinese Technological Companies. arXiv preprint. Retrieved from https://arxiv.org/abs/2501.02468

[15] Configurational Theory in Traditional Manufacturing Industries: A New Model of High-Performing Small and Medium-Sized Enterprises https://doi.org/10.3390/su12176818

[16] Dr. N. Deepalakshmi, 2024. Employee Engagement And Organizational Performance: A Human Resource Perspective April 2024

Educational Administration Theory and Practice journal 30(4):5941-5948 DOI:10.53555/kuey.v30i4.2323

[17] Dixit, A., & Upadhyay, Y. (2021). Role of JD-R model in upticking innovative work behaviour among higher education faculty. RAUSP Management Journal, 56(2), 156-169. https://doi.org/10.1108/rausp-03-2020-0060

[18] El Junusi, Rahman & Agriyanto, Ratno & Wardayati, Maria. (2023). The Role of Innovative Work Behavior and Proactive Behavior in Mediating Employee Engagement and Performance at Public Universities. International Journal of Economics and Management. 17. 345-358. 10.47836/ijeam.17.3.05.

[19] Afum, Y. Agyabeng-Mensah, JA. Owusu, (2020). Translating environmental management practices into improved environmental performance via green organizational culture: insight from Ghanaian manufacturing SMEs J. Supply Chain Manage. Syst., pp. 31-49

[20] E. Appelbaum, t. bailey, p. berg, a.L kalleberg bailey t. A. (2000).Manufacturing advantage: why high-performance work systems pay off Cornell Univ. Press.

[21] Fierce. (2023). The Financial Rewards of Employee Engagement: Better Relationships Bring Results. A fierce white paper. www.fierceinc.com https://wethrive.net/employee-engagement/engagement-models-theories/

[22] Gallup., (2018). The engaged workplace. https://www.gallup.com/services/%0A190118/engaged-workplace.aspx.

[23] Gindert, M., & Müller, M. L. (2024). The Impact of Generative Artificial Intelligence on Ideation and the Performance of Innovation Teams. arXiv preprint. Retrieved from https://arxiv.org/abs/2410.18357

[24] Ghani, B., Hyder, S.I., Yoo, S.J.B., & Han, H. (2023). Does employee engagement promote innovation? The Facilitators of innovative workplace behaviour via mediation and moderation. Heliyon, 9(11), e21817.

[25] Hessari, H., Daneshmandi, F., & Nategh, T. (2023). Investigating the Effect of Technostress on the Perceived Organizational Commitment by Mediating Role of Individual Innovation. arXiv preprint. Retrieved from https://arxiv.org/abs/2310.07806

[26] High-commitment management. (n.d.). In Wikipedia. Retrieved from https://en.wikipedia.org/wiki/High-commitment_management

[27] Side project time. (n.d.). In Wikipedia. Retrieved from https://en.wikipedia.org/wiki/Side_project_time

[28] Ichdan, D, A. (2024). Analysis of employee performance through productivity: The role of kaizen culture, motivation, and work discipline in the manufacturing industry. Annals of Human Resource Management Research, 4(1), 13-28.

[29] Incentive Research Foundation (2019). What top performing manufacturing companies do differently for incentives and rewards. Retrieved from https://theirf.org/research_post/what-top-performing-manufacturing- companies-do-differently-for-incentives-and-rewards-2019/

[30] Javaid, A. Haleem, R.P. Singh, R. Suman, S. R ab, (2021). Role of additive manufacturing applications towards environmental sustainability Adv. Ind. Eng. Polym. Res., pp. 312-322, 10.1016/j.aiepr.2021.07.005

[31] Jánošková, K., & Kráľ, P. (2021). Innovation measurement: An extensive literature analysis. SHS Web of Conferences, 129, 05003. https://doi.org/10.1051/shsconf/202112905003

[32] Kaur, N. (2025). Productivity and efficiency in the manufacturing sector: The effect of employee engagement on organizational performance. JOISS Research. Retrieved from https://joissresearch.org/journal/productivity-and-efficiency-in-the-manufacturing-sector-the-effect-of-employee- engagement-on-organizational-performance/.

[33] Karuna, Jadhav, (2023), September 2023. "A Study on Innovative Employee Engagement Practices."DOI:https://www.researchgate.net/publication/393660241_A_Study_on_Innovative_Employee_Engagement_Practices

[34] Knox, S., & Marin-Cadavid, C. (2022). A practice approach to fostering employee engagement in innovation initiatives in public service organizations. Public Management Review, 1-26.

https://doi.org/10.1080/14719037.2022.2055775

[35] Kunc, M., & O'Brien, F. (2019). The resource-based view: A review anassessment of its critiques. Journal of Management, 45(1), 14–30. https://doi.org/10.1177/0149206318798331

[36] Ludmilla Shkurti and Labeat Mustafa (2024). The impact of employee engagement and innovation performance on business success in manufacturing and service enterprises in Albania and Kosovo. Problems and Perspectives in Management, 22(1), 94-102. doi:10.21511/ppm.22(1).2024.09

[37] Latham, G. P., & Locke, E. A. (2018). Goal setting theory: Controversies and resolutions. Organizational Behavior and Human Decision Processes, 150, 69–80. https://doi.org/10.1016/j.obhdp.2018.07.002

[38] Maskudi, Suseno BD, Munawir A, Firjatullah S. (2024). Employee innovation performance: Exploring non-standard service relationships, psychological contracts, and knowledge sharing in green manufacturing industry development. Journal of Infrastructure, Policy and Development. 8(7): 5111. https://doi.org/10.24294/jipd.v8i7.5111

[39] Madonna P. Melchor, 2024. The Influence of HRM Practices on Employee Performance: A Study of Retail Establishments in a Municipality in the Philippine Mindoro State University- Bongabong, Philippines DOI: https://dx.doi.org/10.47772/IJRISS.2024.8100252 Received: 16 October 2024; Accepted: 21 October 2024; Published: 21 November 2024

[40] Maskudi, Suseno BD, Munawir A, Firjatullah S. (2024). Employee innovation performance: Exploring non-standard service relationships, psychological contracts, and knowledge sharing in green manufacturing industry development. Journal of Infrastructure, Policy and Development. 8(7): 5111. https://doi.org/10.24294/jipd.v8i7.5111

[41] Mamun, et.al, (2020). A Theoretical Study On Factors Influencing Employees Performance, Rewards And Motivation Within Organisation. https://doi.org/10.21272/sec.4(3).113-124.2020

[42] Nacu, A. (2023). Performance evaluation survey questions. Forms.app.. Retrieved from https://forms.app/en/blog/performance-evaluation-survey

[43] Nair, S., Ni, L. W., Tabianan, K., Perumal, I., & Jayabalan, N. (2023). Factors affecting employee performance in the manufacturing industry: A study on Malaysian SMEs. Journal of Southwest Jiaotong University, 58(1). Retrieved from https://jsju.org/index.php/journal/article/view/1546

[44] Paillé, JH. Meija-Morelos, (2019). Organisational support is not always enough to encourage employee environmental performance. The moderating role of exchange ideology J.Clean.Prod.,pp. 10611070,10.1016/j.jclepro.2019.02.192

[45] Q. Wang, R. Shi, F. Zhang, X. Wang, Y. Gao, (2022), How organizational psychological ownership affects corporate green operations - based on a social exchange theory perspective Front. Psychol., 10.3389/fpsyg.2022.985017

[46] Rahadian, F. A. (2020). Employee performance and knowledge management in a manufacturing company: Internal and external factors to consider. Dinasti International Journal of Digital Business Management, 4(4). Retrieved from https://dinastipub.org/DIJDBM/article/view/1899

[47] R. Cropanzano, MS. Mitchell, (2005), Social Exchange Theory: An Interdisciplinary Review J. Manage, pp. 874-900, 10.1177/0149206305279602

[48] Ryan, R. M., & Deci, E. L. (2020). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Press.

[49] Sabbir MdM, KMR. Taufique, (2022). Sustainable employee green behavior in the workplace: Integrating cognitive and non-cognitive factors in corporate environmental policy Bus. Strategy. Environment pp. 11012810.1002/bse.2877

[50] Shah, A. K., Shukla, A., & Rao, P. K. (2025). Evaluating employee performance in the Indian manufacturing sectors: Identifying critical success factors. International Journal of Organizational Analysis. Retrieved from https://www.emerald.com/insight/content/doi/10.1108/ijoa-0920244812/full/html

[51] Lorincová, P. Štarchoň, D. Weberová, M. Hit ka, M. Lipoldová, (2019).Employee motivation as a tool to achieve sustainability of business processes Sustainability in Switzerland.

[52] Sheila D. Cabrestante, Eric Arthur N. Dio* Graduate School, University of St. La Salle, Bacolod City, Philippines. Leadership Competencies as Predictors of Employee Engagement: The Role of Driving Change Through Innovation. September 2025. Journal of Interdisciplinary Perspectives 3(10):531-538. DOI:10.69569/jip.2025.644

[53] Schendlinger, T. (2023). Drivers and challenges of business model innovation. Master's thesis, Johannes Kepler University Linz

[54] Toms, B. K., & Naseer, N. (2023). A study of performance of employees in manufacturing companies. Elementary Education Online, 20(3), 4564– 4569. Retrieved from https://ilkogretimonline.org/index.php/pub/article/view/2904

[55] T. Iftikar, S. Hussain, M.I. Malik, S. Hyder, M . Kaleem, A. Saqib, (2022). Green human resource management and pro-environmental behaviour nexus with the lens of AMO theory Cogent Bus. Manage., (2022), 10.1080/23311975.2022.21 24603

[56] T. Arshi, 2019, Assessing impact of employee engagement on innovation and the mediating role of readiness for innovation January 2019 International Journal of Comparative Management 2(2):174 DOI:10.1504/IJCM.2019.100857

[57] Van Zyl, and Olckers, C., (2021). Work engagement and task performance within a global Dutch ICT-consulting firm: The mediating role of innovative work behaviors. Current Psychology, 40(8), pp. 4012–4023. https://doi.org/10.1007/s12144-019-00339-1