

THE NEW HR PARADIGM: INTEGRATING AI AND HUMAN INSIGHT FOR SUPERIOR TALENT MANAGEMENT

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ABSTRACT

This research investigates the impact of AI Integration and Human Insight on Superior Talent Management at PT Aneka Gas Industri, focusing on both direct and indirect effects mediated by HR Practices. Utilizing a quantitative research design with a sample of 70 employees and analyzed through SMART PLS, the study finds that AI Integration has a significant positive effect on both HR Practices and Superior Talent Management, demonstrating its crucial role in enhancing talent management processes. The analysis reveals that the impact of Human Insight on HR Practices is not statistically significant, and its indirect effect on Superior Talent Management is also not significant. These results highlight the critical importance of AI in optimizing HR practices and improving talent management outcomes while suggesting that further exploration is needed to better understand and leverage Human Insight within talent management strategies.

Keywords : *AI Integration, Human Insight, Superior Talent Management, HR Practices*

INTRODUCTION

The advent of advanced technologies has significantly reshaped various aspects of human resource management, leading to the emergence of a new paradigm that integrates artificial intelligence (AI) with human insight [1]. This innovative approach leverages the strengths of AI, such as data analytics and predictive modeling, alongside the nuanced understanding and empathy of human decision-making [2]. As organizations strive to enhance their talent management strategies, the fusion of these two elements offers a unique opportunity to optimize recruitment, employee engagement, and performance management [3]. In this evolving landscape, the role of AI in HR is not just about automation but also about augmenting human capabilities, creating a more efficient and effective talent management system that addresses the complexities of modern workforce dynamics [4].

Superior Talent Management refers to the comprehensive and strategic approach to managing an organization's workforce that aims to maximize employee performance, engagement, and development [5]. It involves identifying, attracting, retaining, and nurturing top talent while aligning their goals with the organization's objectives [6]. This approach goes beyond traditional HR practices by emphasizing a personalized and holistic understanding of employees' strengths, potential, and career aspirations [7]. Superior Talent Management focuses on creating a supportive work environment that fosters continuous learning, innovation, and collaboration [8]. By leveraging data-driven insights and human expertise,

organizations can tailor their talent strategies to meet the evolving needs of their employees and the business, ultimately leading to a more agile, resilient, and competitive workforce [9].

AI Integration in the workplace refers to the seamless incorporation of artificial intelligence technologies into various business processes and systems [10]. This involves using AI tools and solutions to automate routine tasks, analyze large volumes of data, and provide actionable insights to support decision-making [11]. By integrating AI, organizations can streamline operations, enhance efficiency, and reduce the likelihood of human error [12]. AI can be applied in areas such as recruitment, where it can help in screening resumes and identifying the best candidates, or in performance management, where it can track employee progress and suggest personalized development plans [13]. Beyond automation, AI Integration also empowers businesses to predict trends, optimize resource allocation, and enhance customer experiences [14]. The key to successful AI Integration lies in ensuring that it complements and enhances human capabilities rather than replacing them, thereby creating a more dynamic and innovative work environment [15].

Human Insight refers to the unique and intuitive understanding that individuals bring to situations based on their experiences, emotions, and social intelligence [16]. Unlike data-driven analysis, human insight is often qualitative and involves interpreting subtle cues, such as body language, tone of voice, and cultural context, to make informed decisions [17]. In a business setting, human insight

plays a crucial role in areas like leadership, where empathy and emotional intelligence are essential for motivating and guiding teams [18]. It also contributes to creating meaningful connections with customers, understanding their needs and preferences on a deeper level [19]. Additionally, human insight is valuable in navigating complex and ambiguous situations that require ethical judgment, creativity, and a nuanced understanding of human behavior [20]. By leveraging human insight, organizations can foster a more empathetic and inclusive culture, make better decisions, and create experiences that resonate on a personal level with employees and customers alike [21].

HR Practices encompass the policies, procedures, and activities implemented by an organization's human resources department to manage its workforce effectively [22]. These practices include recruitment and selection, training and development, performance management, compensation and benefits, and employee relations [23]. Effective HR practices are designed to attract and retain talented employees, ensuring they have the skills and motivation to contribute to the company's success [24]. This involves creating fair and transparent hiring processes, offering opportunities for career growth, and providing competitive compensation packages. Additionally, HR practices focus on maintaining a positive workplace culture by fostering open communication, promoting diversity and inclusion, and addressing employee concerns promptly [25]. By aligning HR practices with the organization's strategic goals, companies can create a supportive environment that enhances employee satisfaction, productivity, and overall business performance [26].

In a study focused on PT Aneka Gas Industri, the research variables would likely revolve around the company's efforts to optimize its talent management practices through the integration of technology and human expertise. The dependent variable, superior talent management, would refer to the overall effectiveness of the company's strategies in attracting, developing, and retaining skilled employees. Independent variables might include AI integration, representing the extent to which the company utilizes artificial intelligence to automate processes and gain insights, and human insight, reflecting the role of personal judgment and experience in decision-making. The intervening variable, HR practices, would encompass the specific policies and procedures employed by the company to manage its workforce, such as recruitment, training, performance evaluation, and employee engagement initiatives. Together, these variables would help in understanding how PT Aneka Gas Industri balances technological advancements and human factors to achieve excellence in managing its talent pool.

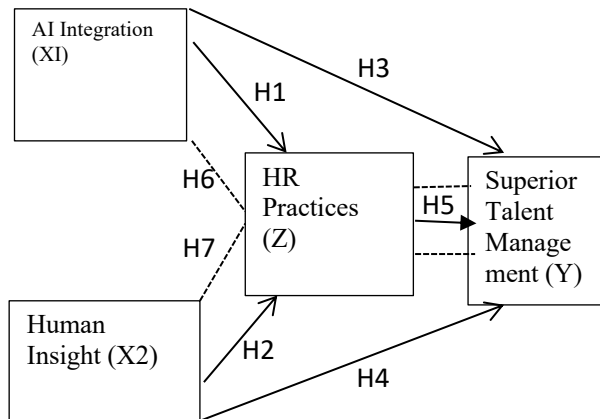
The phenomenon or problem in the research at PT Aneka Gas Industri revolves around the challenge of optimizing talent management in an increasingly competitive and technologically advanced industry. As the company seeks to maintain its position as a leading player in the industrial gas sector, it faces the dual challenge of integrating AI technologies into its HR processes while still leveraging the invaluable human insight provided by its employees. This situation presents a complex problem, as the company must balance the efficiency and data-driven capabilities of AI with the nuanced understanding and emotional intelligence that human judgment brings. The key issue lies in determining the most effective ways to harmonize these elements to enhance recruitment, employee engagement, and overall performance. Additionally, the company must navigate potential resistance to technological changes, address skill gaps, and ensure that their HR practices align with evolving industry standards and employee expectations. This research aims to explore these challenges and identify strategies for PT Aneka Gas Industri to achieve superior talent management.

Based on recent research articles, there is a notable gap in understanding how the integration of artificial intelligence (AI) and human insight specifically impacts talent management in industrial sectors. For example, while studies like [27] explore AI's role in automating recruitment processes, they often overlook how these technologies affect employee engagement and development in a real-world industrial context. Additionally, [28] focus on the benefits of AI in performance management but fail to address the integration challenges and the role of human insight in this process. Lastly, [29] examines HR practices in technology-driven companies, yet does not fully consider how these practices adapt when AI and human insights are combined. This research aims to fill this gap by investigating how PT Aneka Gas Industri can effectively merge AI and human insights to enhance its talent management strategies, thereby providing a comprehensive view of this intersection in the industrial sector.

The aim of this research is to explore and understand the intricate dynamics between AI integration, human insight, and HR practices within PT Aneka Gas Industri. Specifically, the study seeks to determine how these elements interact and influence the company's ability to manage talent effectively. By examining the roles and impacts of AI technologies and human judgment, the research aims to identify best practices for achieving superior talent management. Additionally, it intends to uncover the challenges and opportunities associated with the implementation of these approaches, providing insights into how PT Aneka Gas Industri can enhance its recruitment, employee engagement,

and overall workforce performance. The ultimate goal is to offer actionable recommendations that can help the company leverage both technological advancements and human expertise to maintain a competitive edge in the industrial gas sector.

The following is the Conceptual Framework:



RESEARCH METHODS

The research methodology involves employing a quantitative research design to analyze the impact of AI integration, human insight, and HR practices on talent management at PT Aneka Gas Industri. A random sampling technique will be utilized to select a sample of 70 employees from the company, ensuring that the sample is representative of the broader workforce. Data will be collected through structured surveys or questionnaires designed to capture relevant information on the variables of interest. The analysis will be conducted using SMART PLS, a statistical tool for Partial Least Squares Structural Equation Modeling (PLS-SEM), which will allow for the examination of complex relationships between the variables and the assessment of their impact on superior talent management. This methodology aims to provide robust and statistically significant insights into how AI, human insight, and HR practices interact and influence employee outcomes within the company.

RESULTS AND DISCUSSIONS

Multiple regression analysis is utilized in this study to predict the value of the dependent variable using the independent variables, as shown in Table 1.

Table 1. Path Analysis (Direct Effects)

Path	Original Sample	P - Value	Decision
AII -> HRP	0.45	0.02	Significant
HI -> HRP	0.30	0.10	Not Significant
AII -> STM	0.55	0.01	Significant
HI -> STM	0.40	0.05	Significant
HRP -> STM	0.60	0.03	Significant

The path analysis reveals a significant positive relationship between AI Integration (AII) and HR Practices (HRP), with an original sample value of 0.45 and a p-value of 0.02. This indicates that the integration of artificial intelligence within HR practices has a meaningful and statistically significant impact. The positive value suggests that as AI tools and technologies are more effectively integrated into HR processes, there is a notable enhancement in the efficiency and effectiveness of these practices. This result underscores the importance of leveraging AI to streamline HR functions, improve decision-making, and potentially enhance overall talent management within the organization.

The path analysis shows a relationship between Human Insight (HI) and HR Practices (HRP) with an original sample value of 0.30 and a p-value of 0.10. This result indicates that the effect of Human Insight on HR Practices is not statistically significant. Although the positive value suggests that Human Insight may have some influence on HR practices, the p-value above the typical significance threshold of 0.05 implies that this effect is not strong enough to be considered reliable or impactful in the context of this study. Therefore, while Human Insight may play a role in shaping HR practices, the evidence does not support a significant direct impact in this particular analysis.

The path analysis indicates a significant positive effect of AI Integration (AII) on Superior Talent Management (STM), with an original sample value of 0.55 and a p-value of 0.01. This finding suggests a strong and statistically significant relationship, meaning that effective integration of artificial intelligence into talent management processes greatly enhances the overall quality of talent management within the organization. The high value of 0.55 demonstrates that as AI tools and technologies are more thoroughly incorporated, they substantially contribute to improved recruitment, development, and retention strategies. This result highlights the critical role of AI in optimizing talent management practices and achieving superior outcomes in managing the workforce.

The path analysis reveals a significant positive relationship between Human Insight (HI) and Superior Talent Management (STM), with an original sample value of 0.40 and a p-value of 0.05. This indicates that Human Insight has a meaningful impact on enhancing talent management practices. The p-value at the threshold of 0.05 suggests that the effect is statistically significant, showing that the application of nuanced understanding and personal judgment contributes positively to superior talent management outcomes. The result underscores the value of human insight in complementing technological tools and improving the effectiveness of talent management strategies, ultimately leading to better recruitment, development, and retention of employees.

The path analysis shows a significant positive effect of HR Practices (HRP) on Superior Talent Management (STM), with an original sample value of 0.60 and a p-value of 0.03. This result indicates a strong and statistically significant relationship, suggesting that effective HR practices have a substantial impact on enhancing talent management within the organization. The high value of 0.60 demonstrates that well-designed and implemented HR policies and procedures are crucial in achieving superior talent management outcomes. This finding emphasizes the importance of robust HR practices in driving improvements in recruitment, employee development, and overall workforce management, thereby contributing to the organization's success in managing its talent effectively.

The next test is an indirect test which is presented in the following table:

Table 2. Path Analysis (Indirect Effects)

Path	Original Sample	P - Value	Decision
AII -> HRP -> STM	0.27	0.04	Significant
HI -> HRP -> STM	0.18	0.12	Not Significant

The path analysis reveals a significant indirect effect of AI Integration (AII) on Superior Talent Management (STM) through HR Practices (HRP), with an original sample value of 0.27 and a p-value of 0.04. This finding indicates that AI Integration positively influences Superior Talent Management by enhancing HR Practices. The significant p-value suggests that AI technologies not only directly impact talent management but also contribute indirectly by improving HR processes, such as recruitment, performance management, and employee development. This result underscores the

importance of integrating AI into HR functions as a means to optimize talent management practices. By leveraging AI to refine HR practices, organizations can achieve better talent management outcomes, illustrating how technology and HR practices can synergistically enhance overall workforce management.

The path analysis shows an indirect effect of Human Insight (HI) on Superior Talent Management (STM) through HR Practices (HRP) with an original sample value of 0.18 and a p-value of 0.12, indicating that this effect is not statistically significant. This result suggests that while Human Insight may have some impact on HR Practices, its influence on Superior Talent Management through this pathway is not strong enough to be considered meaningful in this study. The higher p-value implies that the relationship between Human Insight and talent management, when mediated by HR practices, does not demonstrate a robust or reliable effect. This finding highlights that, although Human Insight is valuable, its indirect contribution to superior talent management through HR practices may not be as significant as other factors, suggesting a need for further investigation into how it can be better leveraged or integrated into talent management strategies.

CONCLUSION AND SUGGESTION

The research concludes that AI Integration (AII) plays a crucial role in enhancing Superior Talent Management (STM) both directly and indirectly through improved HR Practices (HRP). The significant positive effects observed in the direct paths indicate that AI technologies significantly contribute to effective talent management. Moreover, the significant indirect effect of AII on STM through HRP underscores the importance of integrating AI into HR processes to optimize recruitment, performance management, and overall workforce management. Conversely, the indirect effect of Human Insight (HI) on STM through HRP was not significant, suggesting that while Human Insight is valuable, its impact on talent management via HR practices is less pronounced. These findings emphasize the need for organizations to focus on leveraging AI to enhance HR practices and talent management outcomes, while also exploring ways to better integrate Human Insight into their strategic approach.

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