

Exploring Trends and Innovations in Industrial Psychology Practice at Manufacturing Company in Bekasi

Nur Muhammad Afnan^{1*}, Muhammad Yudha Satria Wicaksana², Muhammad Firdaus Al Ayubi³, Muhammad Herawan⁴, Adrian Valerius Marbun⁵

^{1,2,3,4,5}Universitas Pelita Bangsa

Email: nurmuhammadafnan@gmail.com

Abstract

This study explores trends and innovations in industrial psychology practices in manufacturing companies in Bekasi during the period 2012-2015. The main objective of this study is to identify how technological developments and positive psychology approaches affect human resource management in the context of a dynamic and stressful manufacturing industry. A systematic literature review method was used to analyze various relevant scientific and practical sources, focusing on aspects of employee selection and recruitment, competency development through digital training, stress management, and transformational leadership. The results of the study indicate that the application of technology such as computer-based recruitment management systems and Artificial Intelligence, e-learning-based training, and well-being programs that integrate mindfulness and mental health applications significantly improve workforce effectiveness and well-being. This study concludes that the integration of technological innovation and humanistic approaches in industrial psychology is a strategic key to improving employee productivity and well-being in Bekasi manufacturing companies. The practical and academic implications of these findings are expected to be the basis for sustainable human resource development in facing future industrial challenges.

Keywords : Industrial Psychology, Innovation, Trends, Manufacturing Companies

Introduction

The manufacturing industry in Bekasi is a crucial pillar of the Indonesian economy, primarily because the region is home to a large number of factories and production companies serving both domestic and export markets. The growth of the manufacturing industry in Bekasi has accelerated significantly over the past decade, creating a need for more strategic and effective human resource (HR) management. In this context, industrial psychology has emerged as a crucial discipline to support the optimization of workforce performance while maintaining employee well-being in a dynamic and demanding environment such as manufacturing (Anderson & Schalk, 2012).

The urgency of implementing industrial psychology in Bekasi is also driven by the characteristics of the manufacturing sector, which is known for its high work pressure, potential accident risks, and the need for continuous competency development to keep pace with technological changes and production process innovations. Industrial psychology serves as a bridge connecting organizational needs with employee

psychological and behavioral conditions, resulting in sustainable synergy (Cascio & Boudreau, 2012).

Along with global changes and technological advances, industrial psychology practices have undergone significant transformations, particularly in the use of digital technology, stress management approaches, and innovative leadership models. Therefore, this study aims to explore the latest trends and innovations in industrial psychology practices implemented in Bekasi manufacturing companies between 2012 and 2015, with the hope of contributing relevant insights to human resource development in the manufacturing sector.

Industrial psychology is a branch of psychology that studies human behavior in the workplace with the primary goal of improving organizational performance while maintaining employee well-being (Borman & Motowidlo, 2013). In its development between 2012 and 2015, many new theories and models were proposed to address the complex challenges of the ever-changing workplace.

One important development is the shift in focus from traditional approaches that emphasize cognitive aspects and technical skills to a holistic approach that also considers psychological and social factors (Grant & Parker, 2014). This approach places attention on intrinsic motivation, work engagement, and psychological well-being as keys to increased productivity.

The transformational leadership model has also received significant attention for its ability to inspire and empower employees to act proactively in the face of change (Erdogan & Bauer, 2013). Furthermore, participatory leadership theory emphasizes the importance of involving employees in decision-making that impacts their work, thereby creating an inclusive and innovative organizational culture (Judge & Kammeyer-Mueller, 2014). In employee selection and development, the integration of information technology such as online psychometric applications and electronic learning management (e-learning) systems is becoming the new norm that increases the efficiency and effectiveness of HR management (Campbell & Wiernik, 2014; Chen & Klimoski, 2014).

Method

This study uses a systematic literature review method to explore and analyze various academic and practical sources relevant to industrial psychology practices in manufacturing companies in Bekasi between 2012 and 2015. A systematic literature review was chosen because this methodology allows researchers to collect data comprehensively, systematically, and objectively from various scientific publications, case study reports, and specialist articles. The reference selection criteria include: (a) publications published between 2012-2015, (b) sources originating from reputable and indexed scientific journals, academic books, and credible industry reports, (c) content discussing industrial psychology specifically in the context of manufacturing or similar organizations, and (d) articles that explicitly discuss trends, technology, innovation, or practices of industrial psychology. Data analysis was conducted using descriptive and thematic techniques, grouping information into several key themes, such as selection technology, digital-based training, employee well-being management, and

transformational leadership. This approach allows for comprehensive and in-depth presentation of results.

Result and Discussion

Technology in Employee Selection and Recruitment The 2012-2015 period marked a major transition in the employee selection and recruitment process at Bekasi manufacturing companies, where technology began to significantly shift conventional selection methods. The use of computer-based recruitment management systems and online psychometrics enabled efficient candidate screening, reduced subjective bias, and accelerated selection times (Ilgen & Pulakos, 2012).

Furthermore, the use of Artificial Intelligence (AI) to analyze video interviews and CVs enhances companies' ability to assess behavioral and psychological aspects of candidates that are difficult to capture using manual methods. This aligns with the findings of Chen and Klimoski (2014), who stated that AI technology can improve the quality of hiring decisions and reduce employee turnover rates.

Stress Management and Employee Well-Being Stress management is a crucial issue in the high-pressure and high-risk manufacturing environment. During this period, companies in Bekasi began implementing positive psychology-based well-being programs such as mindfulness and stress-coping training, which emphasize developing personal strengths and proactively managing work stress (Wright & Cropanzano, 2014).

The use of mobile applications as a tool for monitoring employee mental health conditions and access to real-time psychological counseling services is also starting to be implemented, which allows early intervention against mental health disorders that can disrupt organizational productivity (Schneider, Ehrhart, & Macey, 2013).

Conclusion

An exploration of trends and innovations in industrial psychology practices at a Bekasi manufacturing company between 2012 and 2015 reveals significant transformations marked by the adoption of digital technology and positive psychology approaches. The use of artificial intelligence in selection, e-learning-based training, and employee well-being management through mindfulness programs and mental health monitoring are examples of innovations that improve the efficiency and quality of human resource management. These findings emphasize the need for sustainable development of industrial psychology practices, integrating technology and a holistic humanistic approach, to address the dynamic challenges of the manufacturing industry. Practical implications include the need for investment in HR technology and transformational leadership training. For academics, this study opens up opportunities for further research into the long-term impact of industrial psychology innovations on productivity and workplace well-being.

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