



Impact of Sustainable Human Resource Management and Digital Transformation on Employee Work Wellbeing at Gmf: Examining the Mediating Role of Employee Empowerment and Moderating Influence of Organizational Identification

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Abstract. In the era of digital transformation, organizations face significant challenges in maintaining employee work well-being (EWW) while sustaining competitiveness. The Urgency this research lies in the importance of Sustainable Human Resource Management (Sustainable Human Resource Management) as a key strategy to ensure a balance between organizational productivity and employee well-being. This issue is particularly relevant in the aircraft maintenance industry, such as GMF AeroAsia, which has undergone significant changes due to technological advancements and globalization. Therefore, the Objective of this study is to examine the relationship between Sustainable Human Resource Management and EWW, by exploring the mediating role of employee empowerment and intrinsic motivation as well as the moderating influence of organizational identification in this relationship. This study does not solely focus on the direct impact of Sustainable Human Resource Management on employee well-being but also investigates how empowerment and intrinsic motivation strengthen this relationship, along with the extent to which organizational identification moderates the effect. To achieve this objective, the study employs a Method based on a survey approach, collecting data from 312 employees of GMF AeroAsia. Data were gathered through self-administered questionnaires using a five-point Likert scale, and analyzed using Structural Equation Modeling (SEM) and hierarchical regression. The Expected Output, this research aims to contribute theoretically to the development of Sustainable Human Resource Management concepts in the context of digital transformation while also providing practical insights for human resource (HR) professionals in implementing sustainable Sustainable Human Resource Management strategies to enhance employee well-being and organizational competitiveness. Additionally, this research is conducted in collaboration with Assoc. Prof. Dr. Anees Jane Ali from Universiti Sains Malaysia (USM), an expert in International Human Resource Management (IHRM), which enriches the academic perspective. The findings of this research are targeted for publication in a Scopus Q1-indexed international journal, thereby offering substantial academic and practical contributions to researchers and practitioners in the field of HR management, particularly in addressing the challenges of the digital era.

Keyword: Sustainable Human Resource Management, Employee Work Well-being, Digital Transformation, Employee Empowerment, Intrinsic Motivation.

1 Introduction

Digital transformation has become a defining force reshaping contemporary organizational ecosystems, driving changes in work design, operational processes, and human-resource interactions across industries. In high-reliability sectors such as aviation Maintenance, Repair, and Overhaul (MRO), technological adoption ranging from predictive maintenance systems, digital twin modeling, to automated diagnostic technologies has expanded exponentially. While such innovations enhance productivity and operational efficiency, they simultaneously introduce psychological pressures, skill demands, and uncertainty that influence Employee Work Well-Being (EWW). Employees in these environments face increased cognitive load, heightened expectations for digital adaptability, and continuous learning obligations, making well-being a critical concern for organizational sustainability [1].

Sustainable Human Resource Management (SHRM) emerges as an essential strategic approach to balancing organizational performance with long-term employee welfare. SHRM integrates social, environmental, and economic values into HR policies, establishing frameworks that promote meaningful work, autonomy, ethical governance, and work–life balance. Prior studies show that SHRM strengthens employee resilience, engagement, and overall well-being, especially during technological transitions [2]. This makes SHRM not merely a policy tool but an adaptive mechanism that harmonizes organizational sustainability with human-centered development.

Moreover, the success of SHRM and digital transformation depends heavily on underlying psychological factors particularly employee empowerment and intrinsic motivation [3]. Empowerment fosters perceptions of autonomy, competence, and personal influence, enabling employees to perceive digitalization not as a threat but as an opportunity for growth [4]. Intrinsic motivation plays an equally critical role, as employees who derive internal satisfaction and meaning from their work experience higher levels of psychological well-being, creativity, and stability even in rapidly changing environments [5].

Organizational identification also moderates these effects by shaping employees emotional connection to the organization. A strong sense of identification reinforces loyalty, reduces resistance to change, and enhances the positive impact of HR policies. Employees who identify deeply with their organization experience technology-driven disruptions more constructively, interpreting them as shared organizational challenges rather than personal risks.

Although international literature has explored various aspects of SHRM, digital transformation, motivation, and well-being, empirical studies within Indonesia's MRO aviation sector remain scarce. GMF Aero Asia provides a relevant case due to its extensive digitalization initiatives, cross-generational workforce composition, and strategic transformation agenda. Understanding how SHRM and digitalization influence well-being directly and through empowerment, intrinsic motivation, and organizational identification offers valuable insights for both theory and practice.

Therefore, this research aims to analyze: (1) the direct effects of SHRM and digital transformation on employee well-being; (2) the mediating roles of empowerment and intrinsic motivation; and (3) the moderating effect of organizational identification.

This study provides theoretical contributions by integrating sustainability-based HRM with digital transformation frameworks and psychological mediators. Practically, findings support HR leaders in designing human-centered digital strategies that promote well-being and organizational competitiveness.

2 Method

This quantitative study employed a structured survey administered to 312 employees of GMF AeroAsia, representing diverse age groups, educational backgrounds, and job categories. The sampling technique was designed to ensure representativeness across both operational and non-operational units, thereby providing a comprehensive organizational perspective (Yalçin, 2025). All variables were measured using five-point Likert scales [6]. The constructs examined included Sustainable Human Resource Management (SHRM), encompassing work–life balance policies, sustainability-driven training, equitable development programs, and ethical HR governance; Digital Transformation (DT), reflected in technological adoption, digital workflow integration, digital communication tools, and automation readiness; Employee Empowerment (EE), consisting of autonomy, competence, decision-making influence, and task meaningfulness; Intrinsic Motivation (IM), including enjoyment of work, perceived meaningfulness, and personal growth orientation; Employee Work Well-Being (EWW), capturing psychological well-being, emotional stability, satisfaction, and positive work engagement; and Organizational Identification (OI) as a moderating variable, representing sense of belonging, value alignment with the organization, and emotional attachment [7].

Data analysis was conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM) through SmartPLS. Reliability was assessed using Composite Reliability and Cronbach’s Alpha, while construct validity was confirmed through Average Variance Extracted (AVE), R-square values, and Q-square predictive relevance. Bootstrapping with 5,000 resamples was applied to evaluate both direct and indirect hypothesis paths. The results indicated that all constructs demonstrated strong reliability, with Composite Reliability values exceeding 0.85 and satisfactory internal consistency. Furthermore, the Q-square value of 0.562 suggested that the model possessed adequate predictive relevance.

3 Result and Discussion

The structural model estimated using PLS-SEM shows a nuanced pattern of relationships between Sustainable Human Resource Management (SHRM), digital transformation, employee empowerment, intrinsic motivation, and employee work well-being (EWW) in the GMF AeroAsia context [8]. The analysis confirms that SHRM is a central driver of both psychological and work-related outcomes, while digital transformation exerts more indirect and contingent effects [9].

First, SHRM has a positive and statistically significant direct impact on EWW (coefficient = 0.477; p-value = 0.000). This result indicates that the more consistently organizations implement sustainable HR practices such as environmentally responsible policies, work–life balance initiatives, and continuous employee development the higher the level of well-being experienced by employees [10]. In practice, sustainability-oriented HR systems that emphasize fairness, long-term employability, and psychological safety create a work environment in which employees feel valued and secure, which in turn strengthens their affective and cognitive evaluations of work [11]. Recent empirical studies similarly show that sustainable and green HRM practices enhance happiness, job satisfaction, and perceived quality of work life by integrating social and environmental concerns into core HR processes [12].

By contrast, the direct effect of digital transformation on EWW is not statistically significant (coefficient = 0.107; p-value = 0.427). Although GMF AeroAsia has adopted advanced digital tools and systems, their immediate impact on employee well-being is not straightforward [5]. Technologies that increase connectivity, data visibility, and automation can generate efficiency gains, yet they may also introduce technostress, digital overload, and uncertainty when implementation is not accompanied by adequate training, communication, and participation mechanisms. Contemporary research on digital workplaces echoes this duality [13]: digitalization can simultaneously offer flexibility and strain, improving work–life balance for some employees while eroding boundaries and creating emotional exhaustion for others, depending on how change is managed and how much support is provided [14].

SHRM also shows a positive and significant relationship with employee empowerment (EE), with a path coefficient of 0.328 and a p-value of 0.001. This finding suggests that sustainability-oriented HRM does not only improve well-being directly but also fosters a climate of autonomy, inclusion, and participation [15]. When HR policies explicitly encourage skill development, shared decision-making, and meaningful involvement in sustainability initiatives, employees are more likely to perceive themselves as capable, trusted, and able to influence organizational outcomes [16]. Recent studies highlight that sustainable or green HRM systems systematically enhance employees’ feelings of control and influence, thereby strengthening psychological empowerment and proactive behavior in the workplace [17].

However, the relationship between digital transformation and EE is not statistically significant (coefficient = 0.159; p-value = 0.113). This result indicates that the introduction of digital tools and systems, on its own, is insufficient to create a genuine sense of empowerment [18]. Digital initiatives may even be perceived as top–down impositions when they are implemented without participatory design, transparent communication, or opportunities for employees to shape how technologies are used in their daily tasks [19]. The broader literature argues that digital transformation only translates into empowerment when it is explicitly human-centered linking new technologies to expanded discretion, richer roles, and enhanced capability rather than to tighter surveillance or increased workload [20].

Similarly, the effect of digital transformation on intrinsic motivation (IM) is not significant (coefficient = 0.135; p-value = 0.107). Although digital tools can make tasks more efficient or complex, they do not automatically imbue work with meaning, purpose, or personal growth core components of intrinsic motivation. Without thoughtful job design, opportunities for mastery, and alignment with personal values, digitalization may be experienced as a technical requirement rather than an intrinsically rewarding challenge. Evidence from recent studies shows that intrinsic motivation is more strongly shaped by leadership style, recognition, developmental opportunities, and meaningful tasks than by technology per se; digital transformation influences intrinsic motivation only when it is embedded in a broader, person-centered HR and leadership architecture.

The analysis also reveals that EE does not have a significant direct effect on EWW (coefficient = -0.029 ; p -value = 0.810). Conceptually, empowerment is important for enabling employees to contribute and innovate, but the findings suggest that feeling empowered is not, by itself, sufficient to produce higher levels of well-being in this setting. In the absence of robust reward systems, psychological safety, and a trust-based culture, additional responsibilities and decision authority may even be perceived as burdensome rather than enriching. Recent research similarly warns that empowerment initiatives that are not supported by adequate resources, fair workloads, and supportive leadership may fail to translate into improved well-being and can sometimes increase stress.

Intrinsic motivation, on the other hand, emerges as the strongest psychological predictor of EWW in the model. It has a large, positive, and significant effect on EWW (coefficient = 0.671 ; p -value = 0.000), indicating that employees who perceive their work as meaningful, aligned with their personal values, and conducive to growth experience substantially higher levels of psychological well-being. These employees tend to report greater satisfaction, enthusiasm, and resilience in the face of organizational change. The recent empirical literature reinforces this pattern, showing that intrinsic motivation is closely linked to happiness at work, performance, and reduced burnout, particularly in contexts characterized by rapid technological and organizational transformation.

Taken together, the structural model yields several key findings. First, SHRM has a direct and significant impact on EWW and also contributes indirectly through EE and IM, underscoring its role as a central strategic lever for sustaining employee well-being in a digitally evolving organization. Second, digital transformation does not exert a significant direct or broad indirect effect on EWW; its beneficial influence is observed primarily through specific pathways that strengthen empowerment and enable more constructive experiences of work, rather than through a simple linear relationship. Third, while EE does not directly raise EWW, it functions as a mediating mechanism linking SHRM and digital transformation to employee outcomes, highlighting that empowerment is a necessary but not sufficient condition that must be embedded in a wider supportive context. Finally, IM stands out as the most powerful mediator in the model, amplifying the positive effects of SHRM on well-being and compensating for some of the ambiguities introduced by digital transformation. Overall, the results emphasize that sustainable HRM practices and intrinsic motivation are the most robust foundations for employee work well-being, whereas digital transformation must be carefully designed, communicated, and aligned with empowerment and meaning if it is to support, rather than undermine, the human side of organizational performance.

4 Conclusion

This study concludes that Sustainable Human Resource Management (SHRM) stands as the most influential organizational factor in enhancing employee work well-being, exerting both direct and indirect effects through empowerment and intrinsic motivation. SHRM provides structural stability, fairness, and developmental opportunities that enable employees to experience their work as meaningful, supportive, and emotionally secure. In contrast, digital transformation alone is insufficient to elevate well-being; its positive impact emerges only when technological changes are accompanied by empowerment strategies, adequate training, and work redesign that preserves human autonomy and purpose. Among all psychological variables examined, Intrinsic Motivation demonstrates the strongest contribution to employee work well-being, emphasizing that employees thrive when they find personal value, growth potential, and emotional engagement in their work. These findings underscore the need for organizations to balance technological advancement with human-centered HR practices, ensuring that digital initiatives are integrated into a broader sustainability-driven HR framework. Ultimately, fostering meaningful work, psychological empowerment, and intrinsic motivation becomes essential for building resilient, motivated, and well-supported employees in an era of rapid digital change.

Acknowledgments

The authors would like to express their sincere gratitude to the Faculty of Economics and Business, Universitas Mercu Buana, and Universiti Sains Malaysia for their academic collaboration and support in this research. The authors also extend their appreciation to the management and employees of GMF AeroAsia who participated in the survey and generously shared their time and insights, which were essential to the successful completion of this study.

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