

A Study on Human Resource Management in Digital Era

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Abstract

Digital labour platforms, also known as gig economies, have revolutionized the world of work over the past decade. Digital platforms facilitate coordination of labour market activities in the gig economy. There are a variety of gig jobs, such as consultants, web designers, content writers, and specialists, for online retailing platforms such as Amazon, Flipkart, Ola, Uber, Zomato, Swiggy, etc. Due to the lack of better alternatives, Kerala's online economy taps into labour pools from which transient jobs can be taken and thereby reduces unemployment to a great extent. This study aims to understand the nature and profile of the gig economy in Kerala. Along with that, factors motivating gig work and ensuring a minimum wage are also addressed here. We used a survey-based questionnaire to collect data from 218 delivery gig workers in Kerala, India. Statistical Package for Social Sciences (SPSS) software was used for data analysis. Structural Equation Modeling was used to identify the underlying correlations among data. Secondary data were used to analyse the need for regulatory requirements and minimum wage guarantees for gig workers. The major findings of the study are: In order to face the challenge of unemployment in Kerala, the online gig economy taps into a labour pool willing to take up transient jobs due to lack of better opportunities. Even though gig workers' organisations continue to struggle to achieve legally enforceable protection, their inclusion in UEG programmes could serve as a step towards short-term measures that safeguard rights. The motivation to gig work is forecasted by flexibility, level of job demands and financial rewards, have significant effects on motivation to gig work. Thus, this study throw light on the overall structure and need for development of gig workers in Kerala.

Keywords: Digital labour platforms, Gig economy, Kerala, Online economy

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1. Introduction

The relentless march of digitalization has revolutionized the way organizations operate, necessitating a recalibration of traditional HR practices. In this era of rapid technological advancement, HRM has emerged as a critical domain for organizations seeking to harness the potential of digital tools to optimize their workforce and achieve strategic objectives. This study endeavours to explore the dynamic interplay between HRM and digital transformation, with a particular focus on the evolving responsibilities of HR managers in steering organizations towards success in the digital age.

2. Contemporary HRM in the Digital Era

At the heart of contemporary HRM lies the pursuit of value creation, both for the organization and its employees. In the digital landscape, this entails leveraging technology to streamline HR processes, enhance operational efficiency, and drive innovation. From talent acquisition and onboarding to performance management and learning and development, digitalization has permeated every facet of HRM, enabling organizations to transcend geographical boundaries and tap into global talent pools. Moreover, digital tools have democratized access to information, empowering employees to take ownership of their career development and well-being.

3. The Role of HR Managers in Digital Transformation

In the face of digital disruption, HR managers find themselves at the forefront of organizational change, tasked with navigating the complexities of digital transformation while championing the interests of both management and employees. As stewards of organizational culture, HR managers play a pivotal role in fostering a digital-ready workforce characterized by adaptability, resilience, and continuous learning. Moreover, they serve as strategic partners to top management, providing

insights into workforce dynamics and driving data-driven decision-making.

4. Impact of Technological Changes on HR Practices

The rise of digital technologies has sparked a transformative shift in HR methodologies, marking the onset of an era characterized by unparalleled adaptability and ingenuity. Organizations are increasingly embracing technological advancements, ranging from the integration of cloud-based HR platforms to the deployment of artificial intelligence and machine learning algorithms for predictive analysis. These initiatives empower companies to streamline HR operations and attain a distinct competitive advantage.

Yet, amidst this digital revolution, significant challenges emerge. Issues concerning data privacy, cyber security, and the ethical utilization of AI in HR decision-making loom large. As organizations navigate this landscape, they must prioritize robust measures to safeguard sensitive data, fortify cyber security infrastructure, and ensure the ethical application of AI to uphold the integrity of HR practices. By addressing these concerns head-on, businesses can harness the full potential of digital innovations while maintaining ethical standards and protecting the interests of all stakeholders.

5. Literature Review

In the realm of digital-based Human Resource Management (HRM), a foundational principle lies in acknowledging employees as invaluable human capital. This perspective emphasizes the importance of nurturing digital competencies among employees to enhance the organization's human capital. Key to this approach is strategically identifying and cultivating

essential digital skills within the workforce. The transition towards digital HRM requires proactive efforts from companies to equip employees with the necessary digital proficiencies to effectively navigate technological advancements.

Within this framework, integrating performance management theory with digital HRM involves utilizing data-driven assessments and technological tools to provide timely and insightful feedback, thereby optimizing employee performance. Additionally, incorporating sustainability dimensions into HRM practices is crucial, recognizing the diverse impact of technology on economic, social, and environmental sustainability. This requires a holistic approach where digital HRM initiatives align with broader sustainability objectives, necessitating organizational cultural and structural adjustments.

Organizational change theory emphasizes the importance of adeptly managing technological transitions, encompassing both structural realignments and cultural shifts. Ensuring the ongoing relevance and agility of employee skill sets vis-à-vis technological advancements is vital. Therefore, emphasis is placed on fostering a culture of continuous learning and adaptability, empowering employees to swiftly adapt to evolving technological landscapes.

Furthermore, the discourse on the digital revolution in HRM highlights a shift from traditional administrative functions towards a strategic role in facilitating organizational adaptation to emerging technologies. This involves efforts to cultivate a workforce equipped with the necessary digital acumen to thrive in the Industry 4.0 landscape. Central to this endeavour is creating an enabling work environment that promotes employee engagement through accessible technology and a sense of ownership over their roles.

In navigating this transition, effective organizational change strategies must adopt a people-centric approach, recognizing the

cultural and psychological dimensions inherent in such transformations. This entails conducting a comprehensive assessment of organizational readiness and employee capabilities to embrace and integrate new technologies seamlessly into HRM practices.

6. HR Planning for the Industrial Revolution Era

Human Capital theory underscores the intrinsic value of employees and highlights that investing in their skill development enhances organizational productivity and performance. In the Industry 4.0 era, HR planning must be grounded in a profound comprehension of the novel skill requirements posed by digital technology. This necessitates a focus on identifying and cultivating specialized competencies crucial for organizational success (Kambur, 2022).

Competencies such as digital literacy, data analysis, and adaptability to technological advancements have become indispensable in the context of HR planning amidst the Industrial Revolution 4.0. Performance management theory underscores the process of identifying, measuring, and enhancing employee contributions to organizational objectives (Halid, 2020). Leveraging technology for monitoring and evaluating employee performance forms a crucial aspect of HR planning strategies in the digital age. This theory underscores the significance of fostering a culture of continuous learning and organizational agility to effectively adapt to change.

In the context of HR planning within the Industry 4.0 era, organizations must champion a learning culture that facilitates the acquisition of new skills and adaptation to emerging technologies (Fenech, 2022). Furthermore, the imperative for workforce flexibility is increasingly pronounced, emphasizing the need for employees who can swiftly adjust to evolving market and technological dynamics.

Integrating sustainability into Human Resource Management policies and practices is paramount. HR planning should encompass considerations of economic, social, and environmental sustainability, aligning human resource strategies with organizational sustainability objectives (Hu, 2022). This entails devising policies that not only enhance organizational performance but also contribute positively to broader sustainability goals.

7. Human Resource Management Strategy to Improve Sustainable Company Performance in Industry 4.0

This theory underscores the imperative of integrating economic, social, and environmental dimensions into a company's operations. In the context of HR within Industry 4.0, organizational strategies must account for the social and environmental impacts of HR policies alongside economic sustainability objectives. It emphasizes the continuous need for organizations to learn and adapt, particularly in the fast-paced landscape of Industry 4.0.

In Industry 4.0, HR management strategies should foster a learning culture that supports employees in acquiring new skills and staying abreast of technological advancements. Furthermore, it stresses the significance of measuring and enhancing organizational performance. HR strategies in Industry 4.0 should leverage technology to monitor and evaluate employee performance while providing constructive feedback (Mittal, 2020).

Assessing the readiness of both the organization and its employees to adopt and integrate new technology is crucial. A successful HR strategy in Industry 4.0 necessitates a comprehensive understanding of the organization's technological readiness, including employee training and cultural adaptation.

Understanding the dynamics of organizational change and HR's role in facilitating successful strategy implementation is paramount. In Industry 4.0, HR strategies should promote cultural change conducive to embracing new technology.

Moreover, it emphasizes the value of employees as invaluable human capital. HR strategies in Industry 4.0 should prioritize the development of employees' skills and knowledge to ensure they remain valuable assets amidst rapidly evolving technology.

Lastly, the theory underscores the importance of innovation in enhancing company performance. HR strategies in Industry 4.0 should cultivate a culture of innovation throughout the organization, fostering an environment where new ideas can thrive (Parinsi, 2023).

8. Research Methods

To compile this article, a rigorous research methodology was employed, utilizing systematic literature review techniques and bibliometric analysis. This method was chosen to gather, assess, and synthesize literature concerning the effects of the digital revolution on human resource management.

Relevant information sources were selected from esteemed academic databases such as Google Scholar, IEEE Xplore, EBSCOhost, and ProQuest. Keywords such as "digital revolution," "human resource management," "Industry 4.0," and "technological impact on Human Resource Management" were utilized during the search process. Selection criteria were based on factors like relevance, quality of sources, publication year, and the research methods employed in the articles.

Each chosen article underwent scrutiny to extract essential information including main findings, research methodology, and key concepts. Key themes and issues arising from the literature were identified and categorized to facilitate a more comprehensive analysis.

Conclusions and findings from each article were meticulously analysed to elucidate the impact of the digital revolution on various facets of human resource management. Through this thorough approach, a comprehensive understanding of the implications of digital transformation on HR practices was attained.

9. Results and Discussions

The systematic analysis of the literature review unveiled several overarching themes concerning the impact of the digital revolution on human resource management. These themes encompass the redefinition of Human Resource Management's role in the Industry 4.0 era, HR planning strategies, the integration of sustainability into human resource management practices, and the emergence of digital-centric HR management concepts.

10. Digital-Based Human Resource Management

The discussion extensively covers the concept of digital-based human resource management, shedding light on technology's pivotal role in revolutionizing HR functions. It highlights the imperative of developing digital skills among the workforce and underscores how technology enhances efficiency in recruitment, selection, and performance management processes.

Key literature emphasizes fundamental changes in HR management driven by technology, transitioning from traditional administrative roles to strategic leadership focused on talent development and retention. The urgency of fostering digital skills among employees is emphasized, encompassing digital literacy, data analysis, and adaptability to new tools and platforms.

Regarding recruitment and selection, technology, including digital platforms, AI algorithms, and data analysis, is showcased as a catalyst for quicker and more accurate candidate evaluation,

leading to informed recruitment decisions. Similarly, digital-based performance management systems enable continuous and measurable performance evaluation, providing real-time feedback geared towards employee development.

Furthermore, the discussion underscores the importance of digital collaboration and communication tools in facilitating effective teamwork, particularly in decentralized work environments. However, it also addresses challenges such as data security and privacy, urging HR to ensure compliance with standards and policies safeguarding employee information.

Moving forward, the role of HR in the Industry 4.0 era is explored, emphasizing its transformation into a strategic partner supporting innovation and organizational adaptation to new technologies. HR's proactive role in understanding evolving skills needs and designing relevant training programs is highlighted, alongside its facilitation of communication and collaboration across departments.

In the context of sustainable HR management strategies, the literature emphasizes integrating sustainability principles into HR policies and practices. This includes increasing operational efficiency through sustainable technology adoption and prioritizing employee welfare through health and wellness programs. Moreover, HR plays a crucial role in skills development for sustainable adaptation, fostering a culture where sustainability values are ingrained.

Overall, through the integration of digital technologies and sustainability principles into HR management strategies, organizations can optimize operations, enhance employee welfare, and drive positive change in the era of Industry 4.0 and sustainability.

11. Identified Challenges and Opportunities

This research identifies several challenges in facing digital change, including complex technology integration, changes in organizational culture, and limited human resources. However, within these challenges lie opportunities for organizations to develop new strategies, update HR policies, and train employees to overcome technological obstacles.

One significant challenge is the complexity of technology integration in HR management. Implementing digital-based HR systems necessitates substantial investments and a profound understanding of organizational needs. Transitioning from traditional to digital systems often encounters technical hurdles and necessitates cultural shifts among employees. Overcoming resistance to change and ensuring alignment with values such as sustainability and innovation across organizational culture requires leadership commitment and effective communication strategies.

Limited human resources, both in terms of skills and numbers, pose another challenge. Technology adoption often demands new skills that the current workforce may lack. Additionally, transitioning to digital solutions entails time, effort, and financial resources, which can strain smaller organizations or those with budget constraints.

Despite these challenges, there are significant opportunities for positive organizational impact. Overcoming technology integration and cultural change challenges can lead to the development of more adaptive and innovative strategies. Detailed implementation plans, comprehensive employee training, and feedback mechanisms can facilitate necessary cultural shifts. Limited human resources challenges present opportunities for comprehensive updates to HR policies, including recruitment strategies focused on digital talent

acquisition, training policies aligned with technological needs, and flexible work policies to attract and retain talent.

Intensive employee training not only enhances technical skills but also fosters an understanding of technology's value in organizational success. This empowers employees to thrive in an increasingly digitalized work environment and contribute optimally.

In navigating these difficulties, organizations can strategically leverage opportunities for growth and innovation. By addressing challenges related to technology integration, cultural change, and limited human resources, organizations can advance towards more adaptive and sustainable HR management practices in the digital era.

12. Conclusion

The findings and discussions underscore a profound shift in the paradigm of human resource management catalysed by the digital revolution. Human Resource Management (HRM) transcends its traditional administrative role to emerge as a strategic catalyst for organizational transformation. The integration of technology and digital-based strategies emerges as the linchpin for navigating challenges and capitalizing on opportunities in an increasingly digitalized landscape of work. This study lays a robust foundation for the development of adaptive HRM policies and practices in the era of the digital revolution. HRM assumes a pivotal role in formulating and executing organizational strategies that are responsive to technological shifts, thereby fostering a symbiotic relationship with broader business objectives.

Central to this transformative journey is the integration of technology and digital-based strategies, exemplified by the adoption of HRIS, artificial intelligence, and analytical tools. These tools empower organizations to effectively manage,

develop, and motivate their workforce amidst the complexities of the digital age.

Nevertheless, the path forward is fraught with challenges, including the intricacies of technology integration, cultural shifts, and resource constraints. However, within these challenges lie immense opportunities for innovation and growth. Strategies such as policy refinement and targeted employee training emerge as potent mechanisms for surmounting technological hurdles and leveraging digital transformation to organizational advantage.

Crucially, the success of organizations in navigating digital change hinges not solely on technological prowess but also on the strategic acumen of HRM in managing human resources to achieve business objectives while safeguarding employee well-being. This underscores the imperative of aligning HRM practices with the exigencies of the digital era, wherein HRM assumes a pivotal role in fostering a responsive organizational culture, nurturing future-ready employee skills, and ensuring sustainable organizational practices amidst the dynamic landscape of the digital revolution.

In essence, this study offers a comprehensive elucidation of the transformative impact of the digital revolution on HRM, emphasizing the imperatives of adaptation, innovation, and strategic alignment in managing human resources in an increasingly digitalized milieu. Embracing a digital-centric strategy and integrating technology emerges not merely as a necessity but as an indispensable stride for organizations aspiring to sustain relevance and thrive amid the tumult of the digital revolution.

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