

# The Role of Technology in Enhancing Sustainable Practices in International HRM: A Case Study of West African Multinationals

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## Abstract

This study investigates the increasingly critical role of technology in the development and enhancement of sustainable practices pertaining to the field of International Human Resource Management (IHRM) within the West African Sub-Region. The contemporary corporate environment is being significantly revolutionized by the broad effects of digitalization and globalization, resulting in organizations coming under increased pressure to implement sustainable strategies that align with the realization of the United Nations Sustainable Development Goals (SDGs). Taking this into consideration, this paper explores the role of emerging technologies, such as artificial intelligence and big data analytics, in facilitating the implementation of sustainable HR practices across diverse cultural contexts. By undertaking a focused analysis of case studies of multinational corporations that have achieved success in the integration of technology into their HR processes, this paper identifies key operational and strategic benefits, including enhanced recruitment processes, improved employee engagement and more efficient resource management. Additionally, the paper highlights the challenges regularly faced by organizations when attempting to leverage technology in a bid to achieve sustainability. Such challenges include the management of data of data privacy issues as well as the existence of the digital divide, particularly in the context of the developing world. Essentially, the primary objective of this research paper is to highlight and elucidate technology's transformative role in building a sustainable organizational culture and promoting the achievement of long-term strategic success and competitive advantage in today's global corporate environment. The study aims to offer key insights for HR practitioners and scholars alike, particularly in terms of understanding and maximizing

the undoubted potential benefits of the fusion of technology, sustainability and human resource management with a global focus.

**Keywords:** Technology, Sustainable Practices, International HRM

## INTRODUCTION

Particularly in the contemporary globalized economy in which we currently find ourselves, the integration of technology and Human Resource Management (HRM) has transformed into arguably one of the most significant drivers of sustainable and efficient business. Without a doubt, technology now permeates virtually every aspect of HRM, exhibiting a transformative effect on traditional practices and introducing innovation in key processes such as recruitment, training, performance management and employee engagement (Ali *et al.*, 2022). More recently, the integration of artificial intelligence (AI), data analytics and various digital platforms has invariably led to the increased efficiency and accuracy of HR processes, providing organizations with the capability to make and enforce data-driven decisions, optimize operational efficiency and enhance employee development (Nawaz *et al.*, 2024). Further to this, digital connectivity has significantly proliferated the practice of remote work, a trend which has forced HRM to reshape its processes and policies governing talent management.

In the case of organizations in the developing world, such as within the West African Sub-region, the implementation of technological advancement is accompanied by a host of systemic challenges and a plethora of opportunities which are increasingly evident in the pursuit of sustainable practices that are aligned with established global frameworks such as the United Nations Sustainable Development

Goals (SDGs). Despite growing efforts by West African multinational corporations to leverage technology in the optimization of their Human Resource (HR) processes, the progress is often mitigated by associated issues such as data privacy concerns and the digital divide (Horwitz & Ronnie, 2021).

It is within this context that this paper seeks to evaluate the role of modern technologies in promoting sustainable HR practices in MNCs in the West African sub region. Making use of a case study research approach, this paper elucidates the benefits and disadvantages that exist in this regard, providing essential context and insight regarding the ability of technology to act as a transformative tool in the development of a sustainable corporate environment.

## BACKGROUND OF STUDY

Over the past few years, HRM has rapidly transformed as a direct consequence of the ever-increasing developments in technology. For business that are attempting to successfully navigate and distinguish themselves in what is becoming a more and more complex and competitive global economy, the impact of technology cannot be overstated. As alluded to earlier, the key aspects of HRM practice have become increasingly influenced and revolutionized by the impact of technology. In particular, one of the most significant consequences of technology integration in HRM is the development of novel trends and practices, with many traditional methods and

approaches being reshaped (Sharma *et al*, 2023). AI and focused machine learning have greatly simplified the recruitment process by facilitating the automated screening of CVs and the subsequent alignment of candidates' competence and suitable roles. Additionally, remote working arrangements and efficient access to HR services have become increasingly streamlined with the adoption of cloud-based HRM systems. The ability to make more focused and strategically profitable decisions has also been greatly improved with the development of a host of data analytics tools that provide informative insights that are gathered from vast employee databases. Finally, the ability to pre-determine and anticipate employee trends, pinpoint possible employee retention risks, and create and implement focused strategies aimed at the promotion of employee productivity and satisfaction has been facilitated by the emergence of predictive analytics (Zhang & Chen, 2023)

This study takes into consideration the advancements associated with technology in IHRM and evaluates its role in the enhancement of sustainable practices in this critical area of organizational management. The paper also discusses the related challenges presented by the emergence of technology, particularly within the context of their implications for organizations and HR professionals in the contemporary working environment.

## JUSTIFICATION

The paper's significance is centered around a host of critical reasons, the first of which centers on the principle that, in this modern age, technology has emerged as a key factor in all organizational functions, not excluding HRM. The ability to fully grasp

and comprehend the impact of technology on HRM is essential for the adaptation and survival of any organization operating in the current digital age. Additionally, the incessant and rapid development of technology has resulted in major, groundbreaking modifications within the HRM environment. HRM processes are being dynamically evolved through the integration of prevailing and emerging technologies such as AI, data analytics and wide-spread automation of key activities. Bearing this in mind, there is an increasingly critical need to thoroughly investigate and assess the existent trends to gather key insights relating to their effect on HRM practice.

Further to this, the adoption of technology in HRM presents a plethora of both positive and negative consequences. From one perspective, it provides invaluable possibilities for the enhancement of productivity, efficiency, and established decision-making utilities such as Human Resource Information Systems (HRIS) and software relating to talent management (Abuhantash, 2023). From a negative standpoint however, there are very realistic challenges, such as those associated with data security and privacy, as well as the ethical application of technology in the management of human capital, an area which has raised a great deal of controversy in recent times. Also, according to Haque (2023), the increased reliance on remote work and virtual collaboration tools and platforms has dictated that the role technology has played in the facilitation of essential HRM processes has become ever more significant.

Primarily, this research paper aims to address a gap within existing literature through the critical analysis of technology's impact on HRM, in addition to the related trends and associated challenges. Essentially, by elucidating on this particular

area, this paper seeks to add to the existing body of knowledge and provide stakeholders with a focused guide to successfully manage the dynamics of human capital management in the current digital era.

## OBJECTIVES OF THE STUDY

- To identify the prevailing technology integration trends relating to modern International Human Resource Management practice (IHRM)
- To evaluate the influence of technology in specific aspects of IHRM practice, including performance management, recruitment, training and development and employee engagement
- To assess the challenges relating to the adoption of technology in IHRM practice.

## LITERATURE REVIEW

### Overview of Technology in IHRM

The concept of IHRM centers specifically on the methods, strategies and processes that are utilized in the management of employees within multinational settings. Within this context, these functions take into account a host of key factors such as cultural variances and diversity, legal considerations and the proliferation of globalized business operation. Particularly in terms of the broad effects of both globalization and digitalization, the business environment has been significantly reshaped, with technology emerging as a key influence in the proliferation of sustainable HR practices (Skare & Soriano, 2021).

## Emerging trends in IHRM

Currently, technology adoption across the broad area of organizational function has had several significant implications, not least in the specific field of IHRM. This portion of the literature review explores previous literature that has been published in relation to the implications of technology integration in IHRM, with a specific focus on emerging trends and existent challenges.

### Task efficiency and automation

Automation of traditional IHRM related tasks represents arguably the most significant implication or impact of technology in the field of IHRM. Ekuma, (2023) identifies technological advancements such as AI and machine learning, elucidating their role in the streamlining of key administrative functions, including performance appraisal and the management of employee payroll.

Through the automation of these and other functions, organizations are able to attain heightened levels of efficiency and the potential to implement a more focused and strategic HR resource allocation plan.

### Recruitment and Talent acquisition

From a technology development perspective, the emergence of web-based recruitment tools and digital platforms has dynamically re-shaped the talent acquisition process. A research by El-Menawy & Saleh, (2023), highlighted the utilization of job application portals, social media platforms, and applicant tracking systems (ATS). Specifically, these tools were identified to significantly widen the reach of modern-day recruiters and critically enhanced

the ability to efficiently shortlist and vet candidates who fit the laid out criteria.

Further to this, AI-driven algorithms are being increasingly utilized to evaluate CVs and the suitability of candidates for specific roles. In some instances even pre-interviews or assessments are now undertaken with the use of AI. Together, these innovations have played a key role in the increased efficiency, accuracy and efficacy of the traditional recruitment process (Sharma *et al*, 2023).

### Employee engagement and experience acquisition

Notably, the way in which organizations engage with their staff and develop experience has been critically transformed by technological advancements. A study by Lane *et al* (2023), elaborated on the widespread use of collaboration tools, staff feedback mechanisms and mass communication platforms. The research revealed that these digital tools have engendered critically heightened levels of collaboration and focused interaction among team members, despite their geographical distance.

In addition, the proliferation of tailored learning platforms and mobile-based training systems has empowered organizations with the critical capability of providing customized training and learning experiences that accurately cater to employees specific individual preferences and needs.

### Decision-making and data analytics

The adoption of data analytics utilities in IHRM has provided corporations with ability to devise and implement decisions relating to employee planning and talent management that are increasingly

data-driven. According to Madhani (2022), the ability to leverage HR analytics is fundamental in the process of assessing employee performance, evaluating possible competence gaps, and predicting staffing needs for the future. In order to successfully predict potential challenges, heighten the efficacy of resource allocation, and ensure that HR strategies align seamlessly with strategic organizational goals, organizations can employ employee big data and predictive analytics.

### Prevailing challenges and ethical issues

In spite of the vast benefits presented by technology integration in IHRM, a host of very existent challenges and ethical issues are also at play and cannot be left unaddressed. The use and reliance on algorithms and automated decision-making tools present major issues relating to a lack of objectivity which may result in inherent bias, infringement of privacy stipulations and critically, mass displacement of jobs (Gerdon *et al*, 2022).

Even more critically, the ever growing and developing technological advancements that exist require sustained upgrading and reskilling to guarantee the relevance of employees in what has become a digital-dominant workplace.

## METHODOLOGY

The research was conducted using a desktop research methodology, specifically, previously published literary evidence in relation to the subject area was gathered and analyzed. The aforementioned literature centered primarily on academic papers that have been peer-reviewed. A host of empirical literature was assessed to ensure

that practical, working insights were gathered, bearing in mind that the topic centers on technology and its practical application in the field of IHRM. Secondary data from annual reports and organizational journals and newsletters were also accessed.

In order to ensure that relevant publications and empirical evidence were assessed, specific thematic keywords were used in the research. These keywords were categorized into 5 themes: technology, sustainability, IHRM, trends, HRM practice.

A qualitative research approach was employed, engendering a thorough comprehension of the prevailing trends and challenges associated with sustainable technology integration in IHRM practice, taking into consideration the Sustainable Development Goals.

## Inclusion and Exclusion criteria

### Criteria for inclusion

- Articles published in journals between 2021 and 2024 were included in the review of publications.
- Articles that were accessed online using key phrases such as “technology, sustainability, IHRM, trends, HRM practice” were included.
- Articles related to the West African Sub-region were prioritized, with Nigeria and Ghana being the most commonly referenced areas.

### Criteria for exclusion

- Articles from magazines, newspapers, blog articles and unpublished papers were not included
- Articles that were not relevant, despite showing in searches using selected key phrases were not included.

## RESULTS AND DISCUSSION

Based on the application of the methodology above, several critical findings were made with regard to the implementation of technology in the enhancement of sustainable IHRM practice.

### Task efficiency and automation

For many organizations within the West-African Sub Region, a multitude of HR processes have been successfully automated. Processes such as recruitment, payroll management, onboarding and performance appraisal have been automated to varying degrees with noticeable success. Institutions such as Ghana Communication Technology University in Accra, Ghana, Vodafone Ghana and MTN Nigeria have implemented digital tools and varied AI systems which have significantly streamlined processes, cut down manual intervention and enhanced HRM practice efficiency in a sustainable manner.

### Decision-making and data analytics

Big data analytics have been widely integrated into HR practice in West Africa, and many organizations are employing this technology in their HRM practices. In Ghana, the Ghana Statistical service has promoted the use of data science in supporting the 2030 SDGs and this has fed into the manner in which many successful and established organizations are implementing their HRM.

The key contribution of this form of technology to HRM in the sub-region is that it has provided organizations with an opportunity to make informed decisions relating sustainable workforce strategy

planning, the management of talent and employee engagement. The ability to evaluate huge datasets relating to HR based information has promoted the effective identification of dominant trends, relationships and thematic patterns (Jogarao, 2023). Together, these advancements have provided HR practitioners with the power to develop sustainable strategies for talent management in particular.

## Virtual Assistance and Remote Work

The COVID-19 pandemic has played a major role in the transformation of traditional organizational and workplace environment dynamics. Remote work and associated virtual assistance platforms gained increased prominence and have been consistently used even in the aftermath of the pandemic. Various video-conferencing platforms such as Zoom and Google meet, project management software and cloud-based HR systems have significantly promoted the application of efficient communication and especially in terms of IHRM, collaboration in teams that have varied and dispersed locations. Across West Africa, HR units have integrated remote recruitment and onboarding processes, virtual training and development programmes and remote employee engagement activities in a bid to successfully adapt to global remote work trends.

## Privacy and Security Concerns

The importance of safeguarding privacy of employee and candidate data has been found to be an essential consideration in the adoption of technology in HRM. The ability to properly preserve and protect the plethora of sensitive information regarding

employees is of paramount importance. Organizations are increasingly aware of the need to comply with data protection regulations, and also protect against potential cybersecurity risks. At Ghana Communication Technology University, Vodafone Ghana and MTN Nigeria for example, there are formal data protection policies which spell out the conditions for the access and usage of information relating to employees and other key stakeholders.

## Digital divide and Training Needs

A major implication of the sustained advancement in technology in HRM is the widening skill gap as a direct result of the digital divide that has been created among HR practitioners. It has been observed that sustained training and development as well as focused initiatives for upskilling have been increasingly required to ensure that employees are empowered with the required skillsets and competences to effectively utilize modern HR-related technologies (Ali *et al*, 2023). In addition, it was found that a focus on the development of a sustained environment of innovation and progressive adaptability is integral for the successful integration and adoption of technological advancements.

## LIMITATIONS OF THE STUDY

### Limitation of scope

Due to the depth of the subject area, the study primarily prioritizes the broad contextual implications of technology adoption on sustainable human resource management practices. Taking into consideration

the aforementioned depth of the topic, the paper does not treat the intricacies of associated sub-categories of HRM practice.

### Time restraints

This paper refers to the fast developing nature of modern technology and HRM practice presents a significant challenge in the context of considering and understanding the unique contemporary trends and challenges that exist in a thorough manner. The limited time available for the study presented a challenge, particularly in terms of comprehensively evaluating with some emerging technologies and modern developments.

### Access to data

Taking into consideration the geographical area under consideration, there is a tendency to encounter difficulties in accessing relevant data and literature. Additionally, considering the topic under discussion, some information may be considered as sensitive or proprietary and this could significantly limit findings and the consequent analysis of them.

### General application of findings

The findings elucidated in this paper are likely to not be broadly and holistically applicable across all varied business markets or locations. It is to be considered that variables such as workforce dynamics, corporate culture and governance frameworks can all critically affect the impact of technology on sustainable practices in IRHM.

### Individual/Human factors

Although the study's focus is specifically on the integration of technology in

IHRM, there are certain human or individual issues that were not totally taken into consideration. Individual factors such as change resistance, differences in skill or competence relating to technology and critically ethical considerations which have the potential to affect the integration and implementation of technology in HRM practices (Errida & Lotfi, 2021)

## CONCLUSION

The role of technology in promoting sustainable HR practices within West African multinationals is undeniably transformative. The successful integration of technologies like AI and big data analytics can lead to more efficient and inclusive HR processes, driving sustainable business outcomes. However, the challenges related to the digital divide and data privacy must be overcome to ensure that the benefits of technological innovation are accessible and equitable.

This research provides valuable insights for HR practitioners and scholars aiming to understand and maximize the potential of technology in driving sustainability in a globalized HR landscape. Moving forward, organizations should focus on developing tailored strategies that bridge technological gaps and ensure the ethical application of new technologies to promote sustainability and long-term organizational success

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