A STUDY ON CONTRIBUTION OF DIGITAL HUMAN RESOURCE MANAGEMENT TOWARDS EMPLOYEE PERFORMANCE POST COVID ERA

* Dr. Saraswathy
** Dr. Rita Biswas
*** Ms. Binu Menon

Senior Facilitators', Regenesys Business School, Mumbai

Abstract

Digital Human Resource Management (DHRM), in its digital iteration, is a form of process improvement. The DHRM operation will be conducted using mobile devices, electronic media, online social networks, and information technology. The COVID-19 epidemic has created a complex and demanding environment for leaders and DHRM experts to cope with these new issues. Employee performance has a significant role in deciding such continuation, as it affects the entire firm's performance. Organizations faced difficulties in shaping and maintaining employee performance in the face of the COVID-19 epidemic due to the stress and insecurity it induced. Therefore, this research aims to delineate how DHRM contributes to moulding employee performance via work-related attitudes, including organizational commitment, job satisfaction, then work motivation during a moment of crisis in the association brought on by the COVID-19 epidemic.

Keywords: *DHRM, Employee, Performance, Organization, Technology, Covid-19.*

Introduction:

The organization's digital performance, impact on society, and workflow has all improved due to the rapid development of new technologies. As a result, businesses and their staffs are under increased pressure to evolve with the digital revolution. Organizations have been under pressure to speed up their transition to digital operations due to the recent developments brought about by the global pandemic (Covid-19). Workers will need assistance from DHRM (digital human resource management) to get through this extraordinary transition. Human resource management in the digital age is essential since it helps both employees and employers stay connected (AM et al., 2020).

Employees are a corporation's most valued asset in the modern business world. Employees' contributions to the company's success at the planned, strategic, and working levels are reflected in the success of their respective departments and divisions. Companies had to adjust their procedures once the COVID-19 pandemic hit to reduce the danger of infection by increasing social distancing and stopping employee mobility. Organizations are also anticipating negative repercussions from the epidemic; 46% of Chinese businesses surveyed anticipate a decrease in employee performance owing to COVID-19. However, this study has discussed that remote workers had higher productivity rates, job satisfaction, and output quality. This article aims to examine the role that DHRM plays

in boosting productivity among employees post-COVID-19.

Literature Review:

1. **Key Mechanisms of DHRM:** Digital Human resource management in today's Internet-driven economy relies on cutting-edge innovation to compete. Human resource management must evolve from paper-based to digital (Guimarães & Carriço, 2010). These components are necessary for an HRM change.

A. Digital Workforce

Today's young adults are the first actual digital generation; they grew up with internet-connected gadgets and have always been attracted by the possibilities presented by online services and tools. To interact with a digital employee, a company needs to be digital. As a result, design thinking, mobile apps, video, system analytics and behavioural economics are all ingrained in digital HRM (Attaran et al., 2019).

B. Work and Digital Tasks

There has been a dramatic shift toward using digital platforms for operational tasks and managerial oversight in the workplace. In today's business world, digitizing processes is necessary to cut down on tedious manual labour. Businesses must use various electronic media and communication forms to build rapport with their staff. The organization's work and tasks must also be digitally organized (Ala-Mutka, 2011).

C. Digital Help Desk Operations

Performance management, training and development, Payroll processing, reward and compensation are all HRM tasks that can be supported by carefully planned, implemented, and utilized digital technologies (Bell et al., 2007).

2. **COVID-19 and Digital human resource management Strategy:**

Strategic DHRM entails horizontal cohesion of HRM responsibilities and vertical alignment of DHRM responsibilities with the business's overall strategy. A company's ability to adapt its strategy in the face of adversity is crucial to its success. Planning, allocating resources, coordinating the appropriate systems, and successfully using one's knowledge and resources are all essential for any organisation to succeed (Fine et al., 2020). Given the one-of-a-kind nature and inherent difficulty of COVID-19, it represents a significant obstacle that could threaten the organization's capacity to achieve its goals. Allocating and organising a company's resources are examples of complicated activities. In actuality, COVID-19 has introduced uncertainty. Some experts have predicted an endemic of COVID-19, and many economists anticipate the pandemic's impacts will be felt at least through 2021(Gol, 2020). It's possible that managers and DHRM professionals will need assistance carrying out strategic planning or implementing the first plan. Most businesses were unable to provide sufficient information on their management strategy or their expected reactions to the pandemic, despite the fact that having clear workplace guidelines during challenging times helps to reduce stress and enhance employee motivation and confidence. There is a strong correlation between providing employees with easy access to pandemic information and updates and increasing the likelihood that those employees will remain with the company after the pandemic (Shi et al., 2020). Given the unique nature of this epidemic, organisations may be in a reactionary and survival mode and unable to gather this data, making it difficult for them to respond effectively. In spite of the difficulties involved, increasing a company's resilience is crucial if it is to survive in the years after the spread of COVID-19.

3. **Employee Performance post Covid 19:**

OPEN ACCESS

The events of early 2020 were characterized by a widespread "rapid shift" to remote work, in which millions of employees abandoned their offices to work virtually from home. Workers could communicate with their colleagues and clients using video conferencing services (such as Zoom), which led to a more streamlined workflow supported by technology. Soothing qualities, such as creativity, empathy, and adaptability, were essential throughout this period. For instance, according to the results of a PwC US survey of 6,400 professionals conducted in June 2020, the overall efficiency of employees appeared to be slanted by a unit of super achievers who masked a weakening efficiency between the outstanding two-thirds who started employed longer hours than earlier the epidemic. Super achievers were more productive working from home, while the other 66 per cent said it was difficult to do so due to lack of structure and the absence of a regular commute. However, after the lockdown, their digital performance technology showed an increase in "collaborative activity". This era called for a specific set of hard skills, such as computer literacy, customer service, and project management (Kniffin et al., 2021).

Technology remained vital for internal and external communication, security, and training. One hundred American business leaders were polled, and they anticipated that 80 per cent of their remote employees would return to the office by September 2020 and 88 per cent by December 2020. Physical (e.g., fewer workers on-site, separated workstations) and technological (e.g., remote) interventions prompted return-to-work initiatives (i.e., using touch-free devices instead of handles, moving large meetings online).

Methodology:

Secondary sources were used for this investigation. The book, newspaper and journal articles, published and research reporters, and websites were used to compile secondary data.

A Total of 378 organizations from Poland had taken for research and conducted using Computer-Aided Web Interviewing (CAWI). Specifically, a questionnaire survey was used to gather the information. Neither the size of the organization nor its primary source of money played a role in whether or not it was included in the research sample. Table 1 contains research sample characteristics.

Table 1 Research Sample Characteristic [source: (Bieńkowska, 2022)]

Criterion of Division	Manufacturing Organisations	Trade Organisations	Service Organisations	Total
Micro (below 10 employees)	10	12	8	30
Small (10-49 employees)	29	56	33	118
Medium (50-249 employees)	45	27	43	115
Large (above 249 employees)	46	14	55	115
Total	130	109	139	378

Variable Scale Analysis:

Cronbach's and Aspect Analysis were made to regulate the reliability of the scales under consideration (Table 2). The employed scales were validated based on

Recruiting, Training, Communication, COVID-19 Education, Digitalization, and Corporate Social Responsibility. Common method bias was prevented by controlling for systematic variance (Borcard &

Legendre, 2002). The data makes it possible to infer that nearly all measuring scales are accurate, consistent, and well-fit. It was also verified by discriminant validity testing that the latent variables employed to represent various theoretical notions differ statistically (altogether, HTMT standards were under 0,68, which lets us approve that the selected variable quantity might be used for path analysis).

Table 2 Reliability of Scales [source: (Bieńkowska, 2022)]

Variable	Number of scales	Cronbach's (alpha)	Factor Analysis
Hiring	1	-	-
Employee Development	1	-	-
Digitalization	1	-	-
Job Redesign	2	0,552	69,102
COVID-19 training	1	-	-
Communication	1	-	-
Wellbeing	3	0,473	49,227
Corporate Social Responsibility	1	-	-
Organizational Performance	10	0,846	42,087
Job Performance	7	0,812	47,428
Motivation	3	0,639	58,112
Satisfaction	2	0,594	71,132
Organizational commitment	3	0,666	59,983

Latent variable analysis:

Initially, the validity of the latent variable describing COVID-19-oriented DHRM techniques was established. Because a predetermined subset of strategies can never hope to account for the whole variability of the strategy phenomena, including such a subset as a latent variable in the prototype is appropriate. The tactics listed in Table 3 are accounted for in the model as issues that have a statistically significant impact on the latent variable (Unsworth et al., 2009).

Table 3 Latent variable verification [source: (Bieńkowska, 2022)]

			Estimate	S.E.	C.R.	P
Train C	<---	HRMS	1,000	-	-	-
ReDesiC	<---	HRMS	,984	,080	12,296	***
CSRC	<---	HRMS	,862	,090	9,582	***
WellbeC	<---	HRMS	,859	,073	11,693	***
CommuC	<---	HRMS	,962	,092	10,408	***
DigitC	<---	HRMS	,990	,099	9,992	***
HiringC	<---	HRMS	,681	,092	7,411	***
EmpDevC	<---	HRMS	,736	,094	7,826	***

Path analysis:

Path analysis was conducted on this basis. Table 4 provides a summary of the obtained model (regression coefficients). The model was evaluated, and the results were found. CFI (which should be above 0.8) and RMSEA were initially used to assess the model's fitness (below 0,2). Chi2 (63) = 173,420; p = 0,005; CFI = 0,942; RMSEA = 0,086; these numbers indicate

that the derived model is statistically significant and well-fit. It is possible to conclude the data collected (Shipley, 2016).

The results of the path analysis supported the previously accepted H1-H4 hypotheses by showing that DHRM COVID-19-associated strategies have an effect on organisational performance, which in turn improves employee productivity.

Table 4 Regression Weights for the model [source: (Bieńkowska, 2022)]

			Estimate	S.E.	C.R.	P
Motiva	<---	HRMS	,939	,075	12,573	***
Satisf	<---	HRMS	,903	,080	11,251	***
OrgCom	<---	HRMS	,881	,072	12,224	***
JobPer	<---	Motiva	,254	,042	5,989	***
JobPer	<---	Satisf	,138	,037	3,760	***
JobPer	<---	OrgCom	,299	,043	6,914	***
OrgPerf	<---	JobPer	,611	,038	15,903	***

Result :

The findings can help organizations develop a COVID-19-related hiring strategy. Thus, developing job-related attitudes is necessary to maximize organizational performance, staff efficiency, and the administration's market position. HRM had to change due to the COVID-19 pandemic's internal reorganization. Unfortunately, organizations focused on retaining their market position under challenging times often need to adjust their Digital Human Resource Management (DHRM) policies to safeguard and encourage their personnel. This report gives firms DHRM strategies to reduce COVID-19's impact on employees and a solid base. Enterprises also learn how to use DHRM to boost productivity and success. Employee and organizational performance are critical to the organization's success in a market emergency and uncertainty.

Discussion:

In order to face the difficulties of the COVID-19 epidemic, this research recommended several DHRM strategies, such as implementing effective evaluation procedures, giving workers more autonomy, and providing financial assistance. When people act constructively, they develop a more optimistic worldview. Leaders in today's businesses must demonstrate competence by improving their employees' well-being on the job through measures such as encouragement, acknowledgement, and security

Shared leadership, transformative leadership, workforce health and resilience, team flexibility, and information availability require additional focus from leaders. More effective leadership tactics to sustain employee performance can be identified with the help of future research. In times of crisis, an organization's strategic climate must be in sync with responsible leadership to protect and nurture the welfare of its workforce (Shi et al., 2020).

Managing in an uncertain environment, improving cross-cultural collaboration, and redefining organizational success are all areas where more study is needed in light of the recent COVID-19 epidemic. Examining the connections between leadership traits and corporate social responsibility initiatives in the wake of the COVID-19 epidemic is also encouraged (McWhorter & Bennett, 2020).

Even though HRM organizations insist on adhering to the ethical norms and frameworks that underpin HR

OPEN ACCESS

Original Research Article

work during the COVID-19 pandemic, this guidance is often disregarded. Human resource managers are responsible for determining the significance of professional, ethical rules and developing strategies to ensure they are consistently observed and followed (McWhorter & Bennett, 2020).

During the COVID-19 era, some research looked into how various HRM interventions might have affected worker productivity. During the 2009 COVID-19 epidemic, this research found that employee performance was positively impacted by career development, employee engagement, employee resilience, employee satisfaction, emotional intelligence, and HRD practises. Although a longitudinal study on the effects of HRM interventions during times of crisis on productivity among workers has been proposed, further research is needed.

Conclusion:

It is widely agreed that digital Human Resource Management is necessary for any modern firm. In this paper, we delved deeply into HR digitalization at various levels. The paper began with a summary of HR digitization literature. It was discovered that it had roots in earlier studies, but it has now established itself as a crucial procedure in the modern telecommuting workplace. It was also discovered that numerous barriers to HR digitalization, which may be categorized into the following three levels: organization, technology, and people, impede its successful implementation, such as lack of technically skilled workforce, budget limitations, and user acceptance, financial constraints, management support and small size of the organization. In adding to the operational benefits, digitalizing HR also offers relational benefits, such as the creation of additional communication channels, engagement and employee motivation and high-quality communication. The inherent tensions between these operational priorities can also be reduced. The majority of studies thus far indicate that

digitalizing human resources are an important trend for modern businesses. The Covid-19 outbreak has brought to light the inadequacies of traditional HR processes and shortcomings, yet despite this, the concept of HR digitization is still in its infancy at most expanding businesses. As a result, it is recommended that future studies scientifically investigate other applicable parts of this concept, such as how it affects the worker's productivity on the job. Likewise, governments and policymakers should invest in HR digitalization and provide the necessary infrastructure that aids entrepreneurs in coping with epidemic problems like COVID-19 and developing innovative technology.

Reference

Borcard, D., & Legendre, P. (2002). All-scale spatial analysis of ecological data by means of principal coordinates of neighbour matrices. *Ecological modelling*, *153*(1-2), 51-68.

Ala-Mutka, K. (2011). Mapping digital competence: Towards a conceptual understanding. *Sevilla: Institute for Prospective Technological Studies*, 7-60.

AM, E. N., Affandi, A., Udobong, A., & Sarwani, S. (2020). Implementation of human resource management in the adaptation period for new habits. *International Journal of Educational Administration, Management, and Leadership*, 19-26.

Attaran, M., Attaran, S., & Kirkland, D. (2019). The need for digital workplace: increasing workforce productivity in the information age. *International Journal of Enterprise Information Systems (IJEIS)*, *15*(1), 1-23.

Bell, D. G., Kuehnel, F., Maxwell, C., Kim, R., Kasraie, K., Gaskins, T., ... & Coughlan, J. (2007, March). NASA World Wind: Opensource GIS for mission operations.

In *2007 IEEE Aerospace Conference* (pp. 1-9). IEEE.

Bieńkowska, A., Koszela, A., Sałamacha, A., & Tworek, K. (2022). COVID-19 oriented HRM strategies influence on job and organizational performance through job-related attitudes. *Plos one*, *17*(4), e0266364.

Blake, H., Bermingham, F., Johnson, G., & Tabner, A. (2020). Mitigating the psychological impact of COVID-19 on healthcare workers: a digital learning package. *International journal of environmental research and public health*, *17*(9), 2997.

Chang, D., Xu, H., Rebaza, A., Sharma, L., & Cruz, C. S. D. (2020). Protecting health-care workers from subclinical coronavirus infection. *The Lancet Respiratory Medicine*, *8*(3), e13.

Guimarães, N. M., & Carriço, L. M. (2010). Steps in the Evolution. In *Hypermedia Genes* (pp. 11-23). Springer, Cham.

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., ... & Vugt, M. V. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist*, *76*(1), 63.

Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. *International journal of information management*, *55*, 102171.

Pucik, V., Evans, P., & Björkman, I. (2017). *The global challenge: International human resource management*.

Schislyaeva, E. R., & Plis, K. S. (2021). Personnel management innovations in the digital era: Case of Russia in covid-19 pandemic. *Academy of Strategic Management Journal*, *20*, 1-16.

Shi, F., Wang, J., Shi, J., Wu, Z., Wang, Q., Tang, Z., ... & Shen, D. (2020). Review of artificial intelligence techniques in imaging data acquisition, segmentation, and diagnosis for COVID-19. *IEEE reviews in biomedical engineering*, *14*, 4-15.

Shipley, B. (2016). *Cause and correlation in biology: a user's guide to path analysis, structural equations and causal inference with R*. Cambridge University Press.

Unsworth, N., Redick, T. S., Heitz, R. P., Broadway, J. M., & Engle, R. W. (2009). Complex working memory span tasks and higher-order cognition: A latent-variable analysis of the relationship between processing and storage. *Memory*, *17*(6), 635-654.