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Research Article

ICT and Human Resource Effects on the App and Gig Economy of Nigeria

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ABSTRACT
Given the increasing use of IT in organisations, the eventuality is that a number of challenges are likely to face the HR function, as well as the management of employees. For example, many firms will have to develop strategies through which they might maximise benefits associated with the use of IT in HR operations (such as improving the accuracy of decision-making and also building efficiencies) while ensuring further that they address any potential negative outcomes that the IT might pose on the HR function. This study examines the effects of ICT and human resource operations on the App and Gig economy, with particular emphasis on the communication technology concept.
Keywords: IT organisations, HR function, management, potential negative outcomes.

INTRODUCTION

Based on mixed outcomes that have been reported regarding the interplay between human resource (HR) operations and the aspect of information technology (IT), a common theme is that the impact posed by most of the emerging technologies on the future work implies further that they have and will continue to alter the HR function. For instance, Marler and Parry (2016) observed that some of the digital platforms that have gained increasing use in organisations such as e-Bay and Amazon include Freelancer.com and Uber. Marlow, Lacerenza and Salas (2017) observed further that machine learning and AI have been used to make predictions, find patterns, and conduct data analysis in organisations. It is also notable that whereas most of the manufacturing workers would perform some tasks routinely, industrial robots have changed this arrangement and assumed most of the roles that would otherwise be performed by employees. As reported by Morgan (2016), IT provisions such as virtual and augmented reality have also gained increasing adoption in sectors such as aerospace, oil and gas, construction, and healthcare. The latter trend comes at a time when an increasing number of wearable devices have also been used to steer improvements in the awareness of employees, especially regarding their wellness – and also ensure that their progress is tracked and allow for the planning of organisation measures through which the engagement of such workforces could be maintained. As contended by Zysman and Kenney (2018), the interplay between HR and IT could also be traced to blockchain technology in which information exchange and transactions are technology-led, implying that for enterprise executives, the need for high-level security could not be overstated. This study examines the effects of ICT and human resource operations on the App and Gig economy, with particular emphasis on the communication technology concept.

METHODOLOGY

This study presented the results via graphical procedures, with a particular focus on the relationship between ICT implementation and productivity in the App and Gig economy. With institutional reports being the main source of data, the study sought to sensitize audiences regarding the correlation between ICT implementation as an independent variables and productivity in the App and Gig economy as the dependent variable.

RESULTS AND DISCUSSION

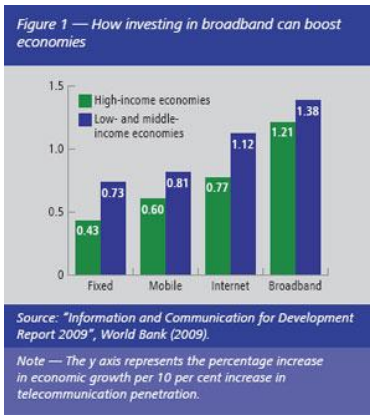

Fig:1

Figure 2. Access to ICT sources by Nigerians.

Fig:

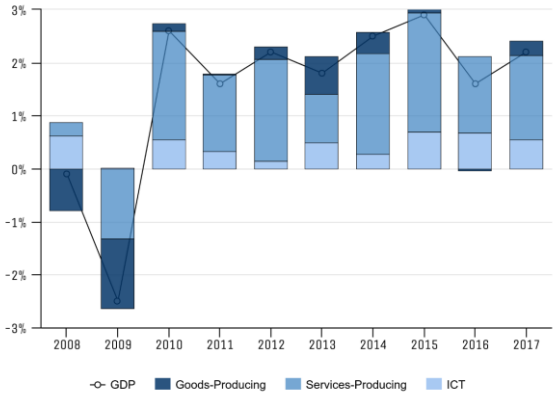

Figure 3: ICT trends

It is also notable that through IT incorporation in HR functions, there is a change in the type of abilities, skills, and knowledge that organisations require. According to Parry and Battista (2015), a specific example of this effect is a case in which there is a decreasing demand or need for routine manual and cognitive skills. Instead, there is an increase in the need for non-routine manual and cognitive skills (PwC, 2017). For organisations, Schlacter, Mcdowall and Cropley *et al.* (2018) suggested that this trend implies that a workforce that will be required is that which exhibits increased interdependence, autonomy, and skill variety, with Stone, Deadrick and Lukaszewski *et al.* (2015) concurring further that in the future, the required workforce is that which will exhibit increased social, technical, creative, and cognitive skills, with their role redefined to that

which involves complementing machines and also playing other tasks that will not have been automated. As documented by Waber, Magnolfi and Lindsay (2018), the incorporation of IT in enterprise processes implies that the new HR function will involve recruiting and developing these competencies and also ensuring that they establish leadership development programmes that are responsive to new challenges posed by IT incorporation in enterprise activities, especially regarding the need to coordinate machines and humans simultaneously.

Apart from changing skill requirements due to IT-based automation in HR activities, another notable trend involves increased place and time flexibility. To reduce the costs linked to the need for physical workplaces and also meet the needs of employees, scholarly evidence suggests that many organisations have resorted to flexible working practices, a trickle-down effect of incorporating IT into HR activities (Wegman, Hoffman and Carter *et al.*, 2018). With developments in mobile and internet, the IT platform has yielded significant improvements in individuals' ability to work out of office hours, due to remote-based arrangements. For the HR function, this trend calls for the need to ensure that flexible working options are established to avoid disadvantaging employees, especially by creating performance and career management systems and also managing flexible working policies cautiously.

Of importance to note is that other studies document that whereas IT incorporation into HR activities comes with beneficial outcomes, especially due to flexible working arrangements in which team members choose when and where to work, it could cause work intensification. Also, IT incorporation into HR practices has reduced the need for physical workplaces and associated costs but ended up hampering face-to-face interaction, yet Wilson (2013) observed that these interactions are important for team-building and connectedness in the workplace. With IT utilisation implying that more and more employees might become dispersed, the eventuality is that how the HR personnel will build relationships in workplaces will change dramatically (Yli-Huumo, Ko and Choi *et al.*, 2016).

Additional evidence suggests that due to IT dominance in workplace operations, employment arrangements have changed. As avowed by Zysman and Kenney (2018), the use of IT platforms in the open talent and gig economy has transformed most of the employment relations into subcontracts, self-employment contracts, and other "gig-work" forms. A specific illustration is that in which Berkery, Morley and Tiernan *et al.* (2017) stated that in the UK, nearly 2.8 million workers are engaged in the gig economy, hence a decline in the demand for permanent employment. From a benefits perspective, the latter trend implies that IT incorporation into enterprise operations increases employee numerical flexibility while reducing costs associated with permanent employment options and physical workplaces (Fleming, 2017). However, the demerit is that IT utilisation in workplaces has led to a lack of institutional connectedness, the inability of team members to influence working environments, and precarious working conditions (Frey and Osborne, 2017).

For HR practitioners, the interplay above implies that the increase in the use of IT in enterprises implies that there is a need to assess how to design workplace strategies through which firms might benefit from the aforementioned flexibility that the IT practice brings to the workplace. Also, Higgins (2017) stated that HR practitioners would have to implement the strategies while in a manner that ensures that they do not put workforces at risk due to lack of employment security and support – while reaping from the IT-related flexibility and cost-saving associated with reduced demand for physical workplaces.

Lastly, the interaction between HR operations and IT implementation has had an effect on the wellbeing of workforces. As documented by Holland and Bardoel (2016), IT implementation in workplaces implied that most of the current workforce is increasingly contactable and connected and that due to global working, most of the task completion processes are approaching a 24/7 possibility. Whereas this trend might be beneficial for enterprises, most of the employees are likely to get overworked, a negative outcome in relation to their wellbeing. Jesuthasan (2017) documented that in an organisation such as Google, most of the respondents tend to highlight that the use of IT damages workforce wellbeing due to burnout and stress arising from increased connectivity.

CONCLUSION

In summary, it remains notable that the enforcement of such policies is difficult and that it is also challenging to balance between the risk of

overworking on the part of the HR personnel and the choice of where and when to work. In response to the concerns about the impact of IT on employee wellbeing, firms such as Daimler have seen their HR departments respond by introducing policies through which workforces could be encouraged to disconnect during periods outside of the working hours, with the benefit of the disconnection policies including reduced burnout and stress.

REFERENCES

1. Berkery, E., Morley, M. J. & Tiernan, S. *et al.* (2017). On the uptake of flexible working arrangements and the association with human resource and organizational performance outcomes. *Eur Manag Rev.,* 14(2), 165-183
2. Fleming, P. (2017). The Human Capital Hoax: Work, Debt and Insecurity in the Era of Uberization. *Organ Stud.,* 38(5), 691-709
3. Frey, C. B. & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technol Forecast Soc.,* 114, 254-280
4. Higgins, V. (2017). Augmented & virtual reality: The future of work, not just play. *Prof Saf.,* 62(6), 86-87
5. Holland, P. & Bardoel, A. (2016). The impact of technology on work in the twenty-first century: exploring the smart and dark side. *Int J Hum Resour Man.,* 27(21), 2579-2581
6. Jesuthasan, R. (2017). HR's new role: rethinking and enabling digital engagement. *Strategic HR Review.,* 16(2), 60-65
7. Marler, J. H. & Parry, E. (2016). Human resource management, strategic involvement and e-HRM technology. *Int J Hum Resour Man.,* 27(19), 2233-2253
8. Marlow, S. L., Lacerenza, C. N. & Salas, E. (2017). Communication in virtual teams: a conceptual framework and research agenda. *Hum Resour Manage Rev.,* 27(4), 575-589
9. Morgan, J. (2016). The future of work. Wiley, Hoboken: New Jersey. 2014 Moore P, Piwek L: Regulating wellbeing in the brave new quantified workplace. *Empl Relat.,* 39(3), 308-316
10. Parry, E. and Battista, V. (2015). The impact of emerging technologies on work: a review of the evidence and implications for the human resource function. *Emerald Open Research*, 1, 5
11. PwC (2017). *Workforce of the future: The competing forces shaping 2030*. Technical Report, PwC
12. Schlacter, A., Mcdowall, A. & Cropley, A. *et al.* (2018). Voluntary work-related technology use during non-work time: A narrative synthesis of empirical research and research agenda. *Int J Manag Rev.,* 20(4), 825-846
13. Stone, D. L., Deadrick, D. L. & Lukaszewski, K. M. *et al.* (2015). The influence of technology on the future of human resource management. *Hum Resour Manage Rev.,* 25(2), 216-231
14. Waber, B., Magnolfi, J. & Lindsay, G. (2018). Workspaces that move people. *Harv Bus Rev.,* 92(10), 68-77, 121
15. Wegman, L. A., Hoffman, B. J. & Carter, N. T. *et al.* (2018). Placing Job Characteristics in Context: Cross-Temporal Meta-Analysis of Changes in Job Characteristics Since 1975. *J Manage.,* 44(1), 352-386
16. Wilson, H. J. (2013). Wearable in the workplace. *Harv Bus Rev.,* 91(9), 23-25
17. Yli-Huumo, J., Ko, D. & Choi, S. *et al.* (2016). Where Is Current Research on Blockchain Technology?-A Systematic Review. *PLoS One.,* 11(10): e0163477
18. Zysman, J. & Kenney, M. (2018). The next phase in the digital revolution: Intelligent tools, platforms, growth, employment. *Commun ACM.,* 61(2), 54-63
19. Adediran, O., Akintunde, A.A., Edo, A.E., Opadijo, O.G., Araoye, A.Impact of urbanization and gender on frequency of metabolic syndrome among native Abuja settlers in Nigeria(2012) Journal of Cardiovascular Disease Research, 3 (3), pp. 191-196.
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