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Ogbeibu, Samuel; Burgess, John; Emelifeonwu, Jude; Pereira, Vijay

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# **HOW GREEN HRM AND TECHNOLOGICAL TURBULENCE PREDICTS GREEN PRODUCT INNOVATION: A STARA TALE**

## **Extended Abstract**

The overt global activities of manufacturing companies and their quest to gain competitive advantage, has led to morbid levels of green-house gas emissions (Chen et al., 2018). This has consequently led to calls by governments of advanced and emerging economies like Malaysia for manufacturing companies to embrace ethically environmentally friendly strategies that will aid the preservation of the planet (Ogbeibu, et al., 2020; Oosthuizen, 2019). Confronted by volatile technological changes in smart technology, artificial intelligence, robotics, and algorithms (STARA), several global manufacturing companies are exploring ways that will aid the development of organisational human capital and green product innovations (GPI) (Ogbeibu et al 2020). Furthermore, organizational leaders in the manufacturing sector are encouraged to constantly imbibe tenets of green HRM (GHRM) to not only promote stakeholders' satisfaction but to also develop leader competencies that are fundamental to STARA in the workplace (Chavez, et al., 2015; Ogbeibu et al 2020). Moreover, the existence of conflicting views of previous research also indicates the need for GHRM and GPI's relationship to be given a closer attention, given recent global warming concerns and how the future of work may be impacted (Chams & García-Bland, 2019). Similarly, our study also contributes through assessing how GHRM predicts GPI.

Nevertheless, the debates by researchers on whether, and how STARA could relay positive impacts in the scholarship of HRM continues. This dialogue, however, seems to ignore how STARA maybe developed as a tool by organisational leaders in advancing the tenets of environmental sustainability (Brougham and Haar, 2018; Parker and Grote, 2019). Leader STARA competence (LSC) is therefore defined as a leader's expert demonstration of vital knowledge and capabilities associated with smart technology, artificial intelligence, robotics, and algorithms in conducts that are suitable, and satisfactorily necessary for accomplishing organisational goals and objectives (Brougham and Haar, 2018; Oosthuizen, 2019). Although studies postulate that LSC can certainly impact job control as leaders become better prepared with principles vital for tackling and overseeing technical risks connected with implementing green centred projects (Tussyadiah and Miller, 2018). To date, it remains unclear how LSC acts to predict GPI, and how LSC impacts TT,

and how LSC influences the impact of GHRM on GPI. Centred on prior debates (Ivancic et al., 2019; Tussyadiah and Miller, 2018; Vishwanath et al., 2019), we thus, predict that LSC will advance green initiatives to support global sustainable development goals (SDG), and promote more efficient conformity of GHRM programs to the tenets of UNGC, and also fulfil various stakeholders' needs.

Similarly, current studies argue that though TT supports organizational competitive advantage, TT also provokes global warming in this present dispensation (Chen et al., 2018; Ogbeibu et al., 2020). TT is therefore defined as the continuous transformation in technology that renders current technologies obsolete (Schumpeter, 1934). Chen, et al. (2018), Hall and Rosson (2006) and Ogbeibu et al. (2020) argue that TT have a positive impact on GPI. Conversely, recent research also debate that TT triggers high operational cost, disrupts processes in operations, and displaces established organisational exigencies (Chavez, et al., 2015). Given the apparent inconsistency in the relative perceptions of previous deliberations, it is uncertain from the literature how TT despite its capricious abilities, predict GPI. Consequently, this study, aims to enhance previous literature, by addressing identified contextual problems which will incite novel perceptions and to analyse how GHRM and LSC and TT concurrently act to predict GPI. Furthermore, this study seeks to contribute to the debate by extending previous modern and theoretical suppositions to assist in offering meaningful and functional understandings into how TT and LSC influences the relationship between GHRM and GPI, and to determine the plausible role of LSC on the nexus between TT and GPI.

Congruent with prior research (Ogbeibu et al., 2020), leaders and their team members from 33 manufacturing organisations in research and development (R&D) and, HRM and Information Technology (I&T) departments characterized our research target population. To determine the organisations, we examined the Malaysian Stock Exchange, and this is coherent with extant literature (Goh, et al., 2014). The organisations are in Penang and Klang Valley, which are major trading centres in Malaysia (Ogbeibu, et al., 2020). 644 copies of questionnaires were distributed, and 222 completed legible questionnaires were returned for further analysis.

Results indicate that TT adversely predicts GPI and bolsters the positive correlation between GHRM and GPI. GHRM positively predict GPI while LSC is not significant. However, LSC intensifies the positive relationships between GHRM, TT and GPI. Results of this research would

be pertinent for helping organisations strengthen their human capital with capabilities that engender competitive advantage, and that also aligns with the tenets of sustainable development goals (SDG). Our study concludes that it is important for organisations to deploy strategy that anchors on LSC, and GHRM in an effort to advance the achievement of the SDG. Additionally, policymakers should develop stratagems that positively aligns with TT impacts based on our study. Practitioners may also want to ensure that organisations that are motivated by green centred values are regularly concerned with producing their GPI not just for profiteering, but for cultivating cleaner production tenets to engender environmental sustainability.

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