

The Roles of Organization Innovation and Aging Workforce in Maysian Manufacturing Sectors' Readiness for Industry 4.0

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The manufacturing sector is an indispensable part of a country's economic system. For Malaysia, it not only helps in transmuting raw material to finished goods but also an essential driver to the country's economic growth. Owing to this sector, Malaysia holds a remarkable position in exports across the world. It is also a principal contributor to the employment of the country. Although, the manufacturing industry is deemed as the backbone of a country's growth, however, the industry also faces many challenges with technological advancements due to the industrial revolution known as Industry 4.0. The aim of Industry 4.0 is to realize productivity and improve efficiency. Its potential disruptive technologies are altering the way of work. Correspondingly, it poses challenges for organizations to innovate and in analyzing their readiness for Industry 4.0. Thereby, current research aimed to investigate the key role of organization innovation and its enablers including electronic human resource management, knowledge-oriented leadership and decentralized organization structure. In addition, change in demographics has shaped another snag in the form of an aging workforce for manufacturing companies. Ergo, the moderating role of the aging workforce was gauged in support to readiness for Industry 4.0 by using Structural Equation Modelling. A quantitative method was adopted to establish the relationship between the variables. By using self-administered questionnaire, a total of 218 useful responses from manufacturing companies of Malaysia were collected and examined through SmartPLS 3 software. The results highlighted the important dual role of organization innovation for readiness of Industry 4.0. It further confirms the moderating act of aging workforce in relationship between organization innovation and readiness for Industry 4.0. Current research contributed to the body of knowledge a detailed vision of Industry 4.0 and its significance for manufacturing sector in Malaysia. The research findings confirmed a noteworthy knowledge concerning high dependency of readiness for Industry 4.0 on organization innovation and moderating effect of aging workforce between them. Additionally, electronic human resource management and knowledge-oriented leadership were also identified as an enabler of organization innovation through empirical examination. The moderating role of organization innovation is of high interest for keen researchers. Current research provides a directive for practitioners to pave the way for successful implementation of Industry 4.0. Forbye, the research outcomes are thought-provoking to national policymakers which can aid in development of impressive policies for Industry 4.0 while considering the vital role of organization innovation and aging workforce.

Keywords: *Aging Workforce, Decentralized Organization Structure, Electronic Human Resource Management, Industry 4.0, Knowledge Oriented Leadership, Organization Innovation*