



Construction Workforce Management in the Fourth Industrial Revolution Era

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Preface

The construction industry worldwide is a massive employer of labour. The industry depends on these workers to carry out its activities of contributing to economic growth and societal development. However, the relationship between the construction industry and its workforce is best described as paradoxical. This is because, despite being heavily dependent on workers, the industry has been notorious for its poor workforce management and lack of attention to workforce management issues. Because most construction organisations operate on project bases, whereby some workers are employed for a particular project, the relationship between employers and employees becomes transient and fluid. This lack of attention to workforce management issues has contributed to the overall poor performance noticed in the construction industry of most countries worldwide. To address this problem, it is necessary to understand the practices needed for construction organisations to manage their workforce effectively.

The review of extant literature shows a wide range of studies on workforce management. Some of these studies have proposed several practices needed for organisations to improve the management of employees. However, the current fourth industrial revolution era, which is revolutionising every industry in countries worldwide, offers the construction industry an opportunity to solve its age-long problems through digital technologies. When adopted correctly, these technologies will also impact how workers are managed and the management practices adopted by construction organisations. However, the construction industry has been lagging in adopting these digital technologies compared to other sectors. This lag is not unconnected to the constant fear of job losses among construction workers, which has led to resistance to the use of technologies on the part of the construction workforce, as noticed within the industry. To alienate this fear and resistance to change among construction workers, adopting the right practices that will lead to effective management becomes crucial.

Therefore, this book explores construction workforce management in the fourth industrial revolution era. The book, through a critical review of existing related theories, models, and practices, unearths the gaps in existing construction workforce management studies and proposes a conceptual model designed to improve the management of workers in the construction industry. The conceptualised model was further examined through experts' opinions to determine the suitability and applicability of the proposed workforce management practices and their attributed measurement variables. Furthermore, the book explored the impact of emerging digital technologies on construction workforce management

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while giving insight into the envisioned challenges of deploying digital tools for effective workforce management in construction.

This book is timely as it is designed to give direction for effectively managing the construction workforce. It promises value to readers as it presents a roadmap designed to ensure the effective management of workers within the construction industry. Owners of construction organisations can benefit from the conceptualised construction workforce management model proposed in the book in their quest for improved workers' productivity. Also, the book will support construction regulatory bodies in ensuring organisations within the industry uphold proper workforce management practices. The book's content will also benefit researchers seeking to expand the frontiers of knowledge on workforce management in construction. To this end, the authors confirm that the text utilised in this work reflects original work and, where necessary, the material has benefited from relevant context-setting / referencing.

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