

**x=(tourism\_work) y=(sdg8) while  
y=true: automate(x)**

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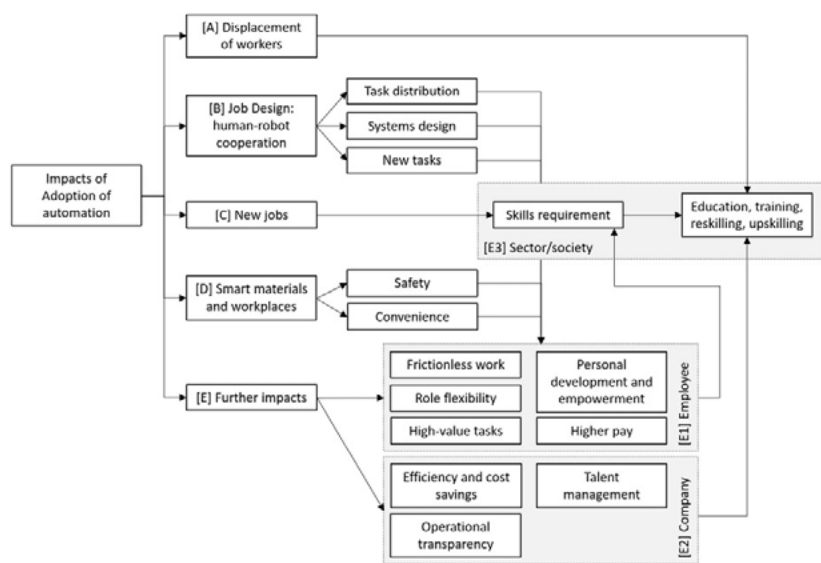
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**ABSTRACT:**

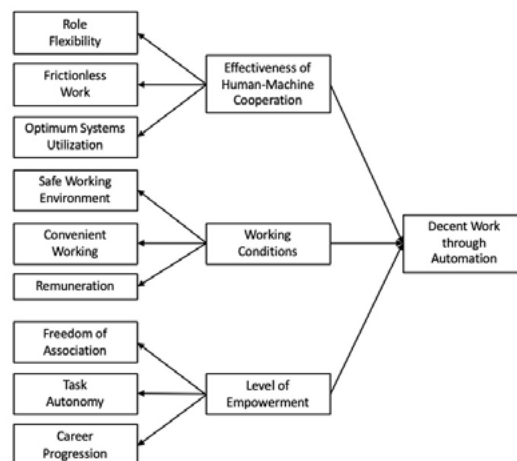
Increasing implementation of automation has brought global concern over the future of jobs in various sectors. This study conceptualizes how automation, found in tourism to be driven largely by labor shortage, can be used to promote decent work. Utilizing Grounded Theory to analyze data from in-depth interviews and focus group discussions with industry practitioners, this study provides rich descriptions of the transformation brought by automation to companies, employees, and wider society and develops a theoretical model to explain ‘Decent Work through Automation’ (DW–A). In doing so, this study opens a pathway for further research on technology and decent work in tourism, including second-and third-order impacts of automation. The paper offers practitioners and policymakers guidelines for responsible adoption of automation.

Figure 1 shows the outcomes of automation in tourism and hospitality operations and conceptualised their relationships.



**Figure 1.** Automation and transformation in work, workplaces, and workforce.

Figure 2 suggested a model outlining how to provide decent work through the adoption of automation. Three factors contribute to: (1) effectiveness of human-machine cooperation, (2) working conditions, and (3) level of empowerment. The operational property of these factors can be defined in terms of their measurement levels (i.e., ineffective–effective human–machine cooperation, bad–good working conditions, low–high level of empowerment) and reflected through several relevant indicators.



**Figure 2.** A model of Decent Work through Automation.



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## SUMMARY:

Those interested in new business ventures in the sector should assign meaningful roles and tasks to complement human labor with machines, delegating mundane, repetitive, and dangerous tasks to machines and allowing employees to take the supervisory roles and/or to focus largely on relational tasks. This also leads to a practical guideline on systems design, emphasizing the need for technology-task fit and the advantages of using single-purpose machines for simplicity and ease of maintenance. This study informs policymakers by proposing pathways to responsible adoption of automation through the promotion of decent work in the travel and tourism sector.

Automation will result in displacement of workers, but for those who stay (or find new jobs) in the sector, automation can support safe, stable, well-paid, and more enjoyable work. This study suggests the importance of shared responsibilities among workers, companies, and policymakers to plan for upskilling, reskilling, and education, preparing the workforce to take on new opportunities presented by automation, and investing in sustainable work. A more accurate assessment of impacts will be needed to create actions to identify and achieve a desired future of automation.



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