AN INVESTIGATION OF HUMAN ERRORS IN SRI LANKAN CONSTRUCTION PROJECTS

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Thesis/Dissertation submitted in partial fulfillment of the requirements for the degree of MSc in Project Management

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DECLARATION

I declare that this is my own work, and this dissertation does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any other university or institute of higher learning and to the best of my knowledge and believe it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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The above candidate has carried out research supervision.	for the master's dissertation under my
Name of the supervisor: Dr. (Mrs) Sachie Gu	unatilake
Signature of the supervisor:	Date:

An Investigation of Human Errors in Sri Lankan Construction Projects

ABSTRACT

Construction industry majorly depends on three key factors namely, human capital, machinery, and technology out of which the human capital is crucial. Even though the developed economies use robots or artificial intelligence to a certain extent, none of the major or minor construction projects can run without human touch. When contemplating construction projects, management plays a substantial role in successful completion of such projects. Project management streamlines the construction projects with its standards and guidelines. Human error can be defined as a sequence of physical and rational events that fail to attain the desired output when these failed attempts cannot be attributed to an interference of a casual random external agent. Human factors greatly influence the outcomes of any project; thus, companies must ensure the human needs are satisfied in order to reduce human errors. This research aims at investigating how to minimize human errors in Sri Lankan construction projects. In this study human errors are discussed under three main categories namely, people, process, and documentation errors. The research was conducted as quantitative research gathering survey data from 66 individuals who are in the decision-making capacity of construction projects, such as project managers etc. The operational level staff is not considered in the survey. Findings suggest that all three categories of human errors, namely, people errors, process errors and documentation errors are equally in high importance and have contributed to various project related issues. Results revealed that communication errors as the highest type of errors under the people error category, frequent changes to the projects plan have the highest RII score under process errors category and finally loss of information was ranked highest error type under documentation errors category. Further it suggests that human errors are interlinked as a result, occurrence of one error leads to occurrence of several other errors. The recommendation of the study majorly stressed on defining clear project scope, communication pipeline streamlining, adopt technology where possible.

Key Words: Construction project management, documentation errors, human errors, people errors, process errors

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