

# **Assessing Human Resource Related Risk Management Frameworks for Small-Scale Software Development Companies in Sri Lanka: A Systematic Review of Literature**

S. R. Herath and P. L. S. Peter

*Department of Industrial Management, University of Kelaniya, Dalugama, Sri Lanka*

Risk factor is an unavoidable element that every industry domain is challenged with, including the software development industry. Dynamic changes followed by technological advancements transpiring in the industry has challenged the existence and evolution of software development oriented startups. As per the structured risk categorization defined in the literature, human resource related risk category is a significant category. The objective of this study is to propose a compatible Human Resource (HR) risk assessment model for small-scale software development companies. It is backed through critical evaluation of published and recognized models in different domains. Furthermore, expert opinions obtained via semi-structured interviews from the Sri Lankan software development industry justify the significant contribution of this study. The methodical review of literature is conducted underlying three main areas i.e. Risk assessment and ERM models, IT sector risks and Risk assessment, and Human resource-related risks and assessment. Since there is a wealth of literature from the study area, few risk assessment models were shortlisted after the process of initial screening for further evaluation considering the acceptability aspect of the research community. Thereby, globally accepted Ernst and Young Global HR risk assessment model was selected as the appropriate model to assess HR related risks that impacts small scaled software development companies and this study extends its capabilities via interpreting potential contingency plans to contribute those entities in the Sri Lankan context.

*Keywords:* Human resource related risks, Software development companies, Risk assessment frameworks