"Key drivers of discrepancies between initial and final contract prices of construction projects in New Zealand"

Abstract: Due to the complex and dynamic nature of construction, majority of construction projects are fraught with significant discrepancies between initial and final adjusted contract sums. These discrepancies introduce enormous risks and uncertainties with consequences such as disputes, high cost of project finance and low profit margins. Previous studies have looked at the myriads of discrepant factors, but no attempt has been made to quantify and segregate them along lines of responsibilities and accountability in the building development process. This research aimed to fill existing knowledge gap by examining the nature and contributions of the key cost escalators from the actions/ inactions of the key stakeholders as well as wider factors. Feedback from a two-stage survey of consultants and contractors in the New Zealand construction industry was analysed using content analysis and multi-attribute methods. Results revealed five sources of discrepant factors. In diminishing order of influences, these comprised issues related to the owner (56%), designers (27%), project & environment (11%), main- and sub-contractors (4%), and the cost consultants, specialist tradespeople, suppliers, council and utility companies (2%). Change orders and errors & omissions in drawings and specifications were the most significant sources of the observed cost escalations which were attributed to the owner and designers, respectively. Kendall’s W concordance test result showed no significant disparity in the analysed responses from the separate groupings of the owners, consultants and contractors. It was recommended that design documentation needed to be fully developed in concert with the contractors and specialist trades people prior to the construction stage to effectively mitigate the discrepancies and ensure more reliable outcomes in the project delivery.