

Configurations of Requirements Instability in Enterprise Asset Development Projects

Shobhit Mathur

IITB-Monash Research Academy
Indian Institute of Technology Bombay and Monash University
Caulfield East, VIC 3145, Australia
shobhit.mathur@monash.edu

Tarikere T. Niranjana

Shailesh J. Mehta School of Management
Indian Institute of Technology Bombay
Mumbai 400076, India
ttniranjana@iitb.ac.in

Kristian Rotaru

Monash Business School
Monash University
Caulfield East, VIC 3145, Australia
kristian.rotaru@monash.edu

Abstract

Project failures resulting from requirements instability in enterprise asset development projects can detrimentally affect the strategic goals of sponsoring organisations. Previous research in project management has primarily concentrated on evolving business needs, technological changes, and socio-political complexity as drivers of requirements instability. However, emerging evidence suggests that the decision-making of project owners is also shaped by their emotional responses to various contextual conditions, such as the physicality of the asset, project scale and duration, asset lifespan, and perceived environmental uncertainty. In this paper, we draw on the psychological ownership theory to investigate how different configurations of contextual conditions contribute to requirements instability in enterprise asset development projects. Our empirical findings, delivered from a global survey of 274 project management professionals, further elucidate the influence of project owners' emotions and perceptions on requirements change management decisions. Using fuzzy-set qualitative comparative analysis, we identify five distinct project configurations of contextual conditions that lead to high levels of requirements instability in enterprise asset development projects. We contribute to behavioural project management literature by offering a configurational perspective on how varying contextual conditions across projects impact project owners' decision-making behaviours and choices.

Keywords

Requirements management, behavioural project management, asset physicality, psychological ownership, Qualitative comparative analysis.

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Biographies

Shobhit Mathur is a PhD candidate at IITB-Monash Research Academy, an Australian-Indian research collaboration between the Indian Institute of Technology Bombay (IITB), India and Monash University, Australia. Shobhit holds a Master's degree with a specialization in Quality Management from Birla Institute of Technology and Science Pilani,

India. He is also an electronics and communication engineering graduate. Shobhit has around a decade of professional experience with stints in IBM, Cognizant, and Infosys in ERP consulting and service management roles. He is a PMP® and ITIL® Foundation certified professional and well acquainted with various project management principles, delivery processes, best practices, and tools. During his employment, he received several performance awards from his former employers for his innovation, dedication, and commitment. In his Project Management Institute-sponsored thesis research, he is studying the role of behavioural factors that affect requirements change management decision-making in projects.

Tarikere T. Niranjana is an Associate Professor of Operations Management at Shailesh J. Mehta School of Management, IITB, India. His research focuses on the cognitive aspects of operations management decision-making and has been published in *Decision Sciences*, *Harvard Business Review*, *Journal of Operations Management*, *Journal of Supply Chain Management*, and *Production and Operations Management*, and won best paper awards at premier academic conferences such as Decision Sciences Institute and Academy of Management. A recipient of the Outstanding Reviewer Award at *Decision Sciences*, he serves on the editorial review boards of *Journal of Business Logistics* and *Journal of Operations Management* and is the Regional Editor (South Asia) for *Journal of Supply Chain Management*.

Kristian Rotaru is an Associate Professor of Business Analytics at Monash Business School, Monash University. Kristian holds a PhD in Economics, a PhD in Accounting Information Systems, and, more recently, a Graduate Diploma in Psychology and an Honours degree in Psychology. He is the Chair of the Steering Committee at the Monash Business Behavioural Laboratory, Associate Director at the Opportunity Tech Lab, and PhD Program Director in the Department of Accounting at Monash Business School. He is an adjunct Associate Professor at the School of Psychological Sciences, Monash University. He is also an Honorary Fellow at the Brain, Mind & Markets Lab at the University of Melbourne. One of the pioneers and key contributors to the emerging research domain of neuroaccounting, he is currently serving as the Editor of the journal *Behavioral Research in Accounting*. His latest research focuses on risk analysis and visualisation, emotion regulation, affective decision-making in everyday economic behaviours, neurocognitive and functional correlates of addiction and well-being, and designing and testing interventions for behavioural change. He has published in *Journal of Operations Management*, *Management Science*, *Production and Operations Management*.