



1<sup>ST</sup> UNDERGRADUATE RESEARCH SYMPOSIUM

ON

PROJECT MANAGEMENT

(URSPM)

# PROCEEDINGS

2<sup>nd</sup> AUGUST 2024

"NAVIGATING PROJECT COMPLEXITY"

## ABSTRACT



DEPARTMENT OF PROJECT MANAGEMENT

FACULTY OF BUSINESS STUDIES

UNIVERSITY OF VAVUNIYA



1<sup>ST</sup> UNDERGRADUATE RESEARCH SYMPOSIUM  
ON  
PROJECT MANAGEMENT  
(URSPM)

**Theme**

"NAVIGATING PROJECT COMPLEXITY"

2<sup>nd</sup> August 2024

**BOOK OF ABSTRACTS**

Department of Project Management  
Faculty of Business Studies  
University of Vavuniya  
Sri Lanka



## **URSPM – 2024 Organizing Committee**

<b>Conference Chair</b>	– Mrs.S.Mathivathany
<b>Convener</b>	– Ms. N. Nithya
<b>Chief-Editor</b>	– Mr.S. Thirugnanasampanthar
<b>Editor (Chair)</b>	– Ms. S. Sathuthika
<b>Editor</b>	– Mr. M.A.D.Sageeth Anjana
<b>Secretary</b>	– Ms. P.R.S. Rechal

### **Sub Committee**

- 1. Registration & Programme Committee**  
Ms.T. Thurkka (chair)
- 2. Reception & Publicity Committee**  
Mr.Ranush Dilshan (chair)  
Mr.W.T.D.P.P. Nilupul  
Ms. Kavisha Maduhari  
Ms.M.G.Induni N Weerasooriya
- 3. Fund Generation Committee**  
Ms.A Chiranthi Madubashini (chair)  
Ms.K.Vinothiny  
Mr. Ranchika Kavidu
- 4. Audio/ Visual & Media Committee**  
Mr. S.M. Safir (chair)  
Ms.G.Ayesha S Gunarathna  
Ms.W.A.A.Ashani Nisansala
- 5. Cultural Programme Committee**  
Ms.Yathurshiya (chair)  
Mr.W.G.Roshan  
Ms.D.M.Prabodani MihiraniMs.B.M.Sofna Banu
- 6. Food and Refreshment Committee**  
Ms.K.A.Asini N Kiththanpahuwa (chair)  
Ms.W.P.D.Ayesha W Pathiranage  
Mr.K.M.Janith Imeshan



<b>Contents</b>	<b>Page no</b>
Message from the Vice Chancellor	VI
Message from the Dean	VII
Message from the Head of the Department	VIII
Message from the Editor-in-Chief	IX
List of Abstract and Authors	X

## **Tracks**

Track 01: Contemporary Project Management

Track 02: Human trafficking, Safe Migration and Disaster Management

Track 03: Modelling Project Complexity

Track 04: Project Leadership

Track 05: Risk Management

Track 06: Sustainability Project Management



Copyright © Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka

Proceedings of the Undergraduate Research Symposium on Project  
Management 2024 (URSPM 2024)

All rights reserved. No part of this publication is reproduced, stored, or  
transmitted in any form without prior permission from the publisher.

Disclaimer The works expressed in this Proceedings are solely from the  
authors.

### **Editorial Board**

Mr.S. Thirugnanasampanthar (Editor-in-Chief)

### **Editors**

Ms. S. Sathuthika

Mr. M.A.D.Sageeth Anjana

Cover page design – Ms.H.A.A.K.Madhusani

ISBN 9 786246 269111(Print)

ISBN 9 786246 269128 (e-copy) Published by the Department of Project  
Management, Faculty of Business Studies, University of Vavuniya  
Pambaimadu, Vavuniya 43000 Sri Lanka

August 2024



## KEYNOTE SPEAKERS



Eng Saman Kandanearachchi  
President and Board of Director  
PMI Sri Lankan Chapter  
Sri Lanka



Dr. Madhu Fernando  
Founder Director, CEO  
PMI Sri Lanka Chapter &  
Managing Director of Innova Strategies Pvt Ltd.



Mrs. Selva Kamalathas  
Secretary General (for)  
RAHAMA  
FORUT



## PANEL 1- MODERATOR & SPEAKERS

### MODERATOR



Prof. Y. Nanthagopan  
Dean  
Faculty of Business Studies  
University of Vavuniya

### SPEAKERS



Aruna Kooragamage  
Project / Program Management Consultant  
& Lecturer, ONVE Consultant  
Past President, PMI Sri Lanka Chapter



Prof. Y. Nanthagopan  
Dean  
Faculty of Business Studies  
University of Vavuniya



Dhammike Mendis  
Executive Vice President  
PMI Sri Lanka Chapter  
Colombo Sri Lanka



K. Ramanash  
Learning and Knowledge Management  
Specialist, Capacity Development for Local  
Government (CDLG) Project, UNDP



Dr. (Mrs). K. Yasodara  
Senior Lecturer  
Faculty of Humanities & Social Sciences  
Open University of Sri Lanka



## PANEL 2- MODERATOR & SPEAKERS

### MODERATOR



Mr. S. Thirugnanasampanthar  
Senior Lecturer in Project Management  
Department of Project Management  
Faculty of Business Studies  
University of Vavuniya

### SPEAKERS



Ms. S. Sharangi  
Assistant Lecturer in Project Management  
Department of Project Management  
Faculty of Business Studies



Ms. S. Ajitha  
Assistant Lecturer in Project Management  
Department of Project Management  
Faculty of Business Studies



Mr. L. Pratheepganth  
Former Assistant Lecturer in Project Management  
Program Coordinator  
International Medical Health Organization



Ms. T. Nirosha  
Former Assistant Lecturer in Project  
Management  
Management Executives  
Projects & SMESs  
Cevlon Chamber of Commerce





## Message from the Vice Chancellor



With great pleasure and anticipation, I extend my warmest greetings to all project management undergraduate participants of the Undergraduate Research Symposium on Project Management 2024 (URSPM 2024). This symposium marks a significant milestone in the academic journey of our undergraduate students, providing a platform to showcase their research endeavors and contribute to the growing body of knowledge in project management. Developing project management competencies has become vital as projects have contributed to the world's economy by creating products, services, technology, processes, and results. Therefore, this first initiative at the Department of Project Management of the Faculty of Business Studies of the University of Vavuniya is commendable.

The University of Vavuniya has always been committed to fostering a culture of research, innovation, and dissemination, and this symposium is a testament to our dedication to nurturing the intellectual growth of our students. I commend the organizers and faculty members for their efforts in creating this valuable opportunity. I encourage all participants to engage in stimulating discussions, share their insights, and learn from the diverse perspectives presented at the symposium. Your research work can potentially make a tangible impact on project management and contribute to addressing real-world challenges.

I wish all participants the very best as you present your research findings. May this symposium be a prolific, educational, and inspiring experience for all involved.

Senior Professor A. Atputharajah  
Vice Chancellor  
University of Vavuniya, Sri Lanka



## Message from the Dean Faculty of Business studies



With great pleasure, I welcome you to the Project Management Undergraduate Research Symposium. This event provides a platform for our talented undergraduates in Bachelor of Business Management Honors in Project Management of the Faculty of Business Studies to showcase their research skills and present the results of their independent research projects and dissertations. Throughout this undergraduate research symposium on Project Management (URSPM 2024) with the theme “**Navigating Project Complexity**”, you will witness the culmination of their hard work, dedication, and intellectual curiosity.

I commend our students for their commitment to academic excellence and passion for advancing project management knowledge. Project Management has become a profession, and the world has become a project economy. PMI defines The Project Economy as a “fundamental paradigm shift” in the business world toward using projects to handle work and solve problems. As a pioneer Faculty that has been offering undergraduate honors degree programmes in project management in our country, I am congratulating the initiation of the Department of Project Management and the team of academic staff and the Project Management Club for their prospective efforts to hail the first-ever undergraduate research symposium in the Faculty of Business Studies.

I sincerely thank the organizing committee for their tireless efforts in making this event a resounding success. To our student presenters, mentors, and judges, thank you for your invaluable contributions. May this symposium inspire future research endeavors and foster a deeper appreciation for the dynamic field of project management. I wish you an enlightening and engaging seminar!

Professor Y. Nanthagopan  
Dean/ Faculty of Business Studies  
University of Vavuniya, Sri Lanka



## Message from the Head Department of Project Management



I am delighted to send my message to the Undergraduate Research Symposium on Project Management 2024 (URSPM 2024), where we embark on a journey of exploration and innovation. This year's theme, **"Navigating Project Complexity,"** resonates deeply with project managers' challenges in today's dynamic world as the Head of the Department of Project Management of the Faculty of Business Studies for the first-ever Undergraduate Research Symposium on Project Management 2024. Undergraduate research symposiums have become an essential event in the faculties of state universities, providing an opportunity for the undergrads to present their research findings and ideas, where disseminating knowledge is a part of our responsibility as an academic institution.

Moreover, at the Department of Project Management of the Faculty of Business Studies, we make many efforts to develop the soft skills of our graduates. This is an excellent opportunity for students offered by the Department of Project Management, and I hope students will have a memorable experience. As they share their findings, let us engage in thought-provoking discussions, challenge assumptions, and foster collaborative learning. Research symposiums are herculean tasks that I wish to thank and congratulate the Dean/ FBS for his continuous enthusiastic guidance and support, my colleagues for the making of this event, the PM Club for all your painstaking efforts and the organizers of the URSPM 2024 for organizing this event for the first year. In particular, I would like to thank our partners and sponsors for honoring and making the URSPM 2024 hailed. I thank my team, the PM Club, and organizing committee members, and I wish all participants and presenters well. May this symposium inspire us to navigate complexity with resilience, creativity, and a shared vision for impactful project management.

Mrs.S.Mathivathany

Head, Department of Project Management, University of Vavuniya



## Message from the Convener



It is with great pleasure and honor that I write this message as the Convener of the first Undergraduate Research Symposium on Project Management 2024 (URSPM 2024), organized by the Department of Project Management, Faculty of Business Studies, University of Vavuniya, Sri Lanka, under the theme “Navigating Project Complexity.”

This pioneering initiative marks a significant milestone, and I believe the outcomes of the research presented will inspire future young students and graduates to produce high-quality, contemporary research in the field of project management.

I sincerely hope that this inaugural event, along with the abstracts presented in the symposium, will open new avenues for future collaboration between undergraduates and scholars.

I would like to extend my heartfelt thanks to all the undergraduate authors for their dedicated contributions, time, and effort, which have made this conference and the publication of the proceedings possible. My deepest gratitude is also directed towards the reviewers of URSPM 2024 for their insightful feedback and timely completion of the review process. Additionally, I acknowledge the tremendous efforts of Head of the Department and all the organizing committee members, whose hard work and commitment have been pivotal to the success of the symposium.

As the Convener, I am confident that the valuable insights shared in this conference will continue to foster growth in the research community. I encourage readers to engage with the authors of URSPM 2024 and offer constructive feedback to further enhance future research in this dynamic field.

Miss. N. Nithya  
3<sup>rd</sup> Year  
Department of Project Management  
Faculty of Business Studies.



## Message from the Editor-in-Chief



It is with boundless pleasure that I write this message as the Chief Editor of the editorial board for the proceedings of the first Undergraduate Research Symposium on Project Management 2024 (URSPM 2024) organized by the Department of Project Management, Faculty of Business Studies, University of Vavuniya, Sri Lanka under the theme of “Navigating Project Complexity”.

The conference proceedings – Book of Abstracts consists of 32 outstanding abstracts of the undergraduates from the project management students, which were carried out concerning multiple project management topics. I believe this first initiative and the outcomes of the presented research interests will encourage the future final year and passing out batches of relatively high-quality contemporary research in project management. I sincerely hope that this big first step through the URSPM 2024 and the abstracts of the symposium will open new doors for fresher and great opportunities for undergrads and scholars to work hand in hand to contribute to the theory and practices of the Project Economies ahead in the world.

I thank all undergrad authors for their substantial dedicated contributions, time, and energetic effort, which made the conference and publication of conference proceedings possible. Moreover, my sincere gratitude is extended to all the reviewers of URSM 2024 for their constructive feedback and rapid completion of the review process. Above all, the services extended by all the organizing committee members of the symposium are highly accredited. As the Chief Editor, I also sincerely hope that the readers will share their insights with the authors of URSPM 2024 for further improvement of future research.

Mr. S. Thirugnanasampanthar  
Senior Lecturer in Project Management  
Department of Project Management  
Faculty of Business Studies.



## List of Abstracts and Authors

### Track 01: Contemporary Project Management

No	Title	Page No.
01	Project manager's emotional intelligence and project success. With the reference of it industry in western province. Mathiyalagan Dharshan and Thirugnanasampanthar Sivapathaviruthayar	15
02	Change management practices in Sri Lankan software development projects Tikiri Sandamini Lakshani Dahanayaka, and Nanthagopan Yogarajah	16
03	An exploratory study on virtual project management practices in it industry: Sri Lanka Bandara D.U.S, and Nanthagopan Yogarajah	17
04	Exploring the knowledge management practices in non-governmental organizations in Sri Lanka Thuvaraka Ithayarasa, and Nanthagopan Yogarajah	18
05	Study on the factors affecting knowledge sharing Sri Lankan IT industry Jayamini Gunasekara, and Nanthagopan Yogarajah	19

### Track 02: Human trafficking, Safe Migration and Disaster Management

No	Title	Page No.
01	Impact study of the wind power project: Case study of Vallibel Wind Farm Rathnapura district Dayananda P. B. and Mathivathany Sasitharan	21
02	A study on disaster management practices: a case study of the Guhagoda solid waste management project of Kandy Municipal Council Achani Nisansala, and Mathivathany Sasitharan	22
03	The Socio-economic and environmental impact of Thambapavani wind power project in Mannar district Posterdifan Prakcy Robina, and Mathivathany Sasitharan	23



04	Human trafficking of Sri Lankan ex-soldiers to Ukrainian war: Implications for Sri Lanka Sathuthika Sasikumar and Thirugnanasampanthar Sivapathaviruthayar	24
05	Human Trafficking for Sexual Crimes Thurkka Thevakumar, and Mathivathany Sasitharan	25
06	Human Trafficking for Cyber Slavery and Crimes Ranush Dilshan. A. O. M, Anjana Appuhami M.A.D.S and Ajitha Silvester	26
07	Child Trafficking and Baby Farming in Sri Lanka Bandara. D. U. S, and Sharangi Sasitharan	27

### Track 03: Modelling Project Complexity

No	Title	Page No.
01	The challenges in implementing project triple constraints in the apparel industry in the Colombo district Dashika Chandraratne, and Mathivathany Sasitharan	29
02	Impact of Kanban practices on project management performance of the construction industry Dimuthma Umashani, K. A. and Thirugnanasampanthar Sivapathaviruthayar	30
03	Issues and Challenges in Scrum Methodology Implementation in Sri Lanka Software Projects Jinoshanth P, Nanthagopan Yogarajah	31
04	The influence of artificial intelligence on project management knowledge areas in IT industry Dhanushika. S, and Nanthagopan Yogarajah	32
05	Dynamic project management capabilities and business model digitalisation in manufacturing organisations Pihille Gedara Nadeesha Tharangani Wijethunga, and Nanthagopan Yogarajah	33
06	Client influence on agile project success in the Sri Lankan Software industry Yadharshika Selvaraj, and Nathagopan Yogarajah	34
07	The effects of project management information systems on decision-making in managing projects of NGOs in Eastern Province	35



	Ibraheem Mohammed Manasir, and Thirugnanasampanthar Sivapathaviruthayar	
08	Study on social safeguard management measures on Kandy multimodal transport terminal project Mahakumbure Gedara Danoji Kavindi Sandeepika Mahakumbura , and Mathivathany Sasitharan	36
09	A study on project management practices on project life cycle in manufacturing Industries Muleffersh Fathima Shehla, and Nanthagopan Yogarajah	37
10	Applicability of project management performance domains for agile-developed IT projects Tharan Thuraisinkam, and Nanthagopan Yogarajah	38

#### Track 04: Project Leadership

No	Title	Page No.
01	Employee retention strategies and practices in the construction industry in Sri Lanka Sarojani Selambram, and Thirugnanasampanthar Sivapathaviruthayar	40
02	Virtual reality for client satisfaction in construction projects: a stakeholder-centric approach Emalda. J. V, and Thirugnanasampanthar Sivapathaviruthayar	41

#### Track 05: Risk Management

No	Title	Page No.
01	Study on risk management practices of the central expressway construction project in Sri Lanka Harshika Sewwandi Jayalath, and Mathivathany Sasitharan	43

#### Track 06: Sustainability Project Management

No	Title	Page No.
01	Quality management practices in developing projects in the Colombo district Kaushalya Rathnasiri, and Mathivathany Sasitharan	45





02	Project Management Competencies for Regional Development; Case Study from Daduru Oya Reservoir Project. Wathsala Munasinghe. M. A. S, and Mathivathany Sasitharan	46
03	Integration management practices and project Success in the construction industry in Jaffna district Marie Vinothini Alphonsus, and Thirugnanasampanthar Sivapathaviruthayar	47
04	How do project schedule management practices support reducing delays in construction projects in the Kurunegal district? Piyumika Wijesena .U.L.H, and Thirugnanasampanthar Sivapathaviruthayar	48
05	Exploring the project management practices of micro, small, and medium entrepreneurs in Kandy, Sri Lanka Wickramasinghe W. T. E, and Nanthagopan Yogarajah	49
06	A study on MEAL practices on community development projects in Mullaitivu district – special reference in public sectors Kirijana Palachchandren, and Nanthagopan Yogarajah	50
07	Environment Analysis of Colombo International Financial City Development Project Amarasighe L.A.H.V, and Nanthagopan Yogarajah	51



## **Track 01: Contemporary Project Management**



## **Project Manager's Emotional Intelligence and Project Success. With The Reference of It Industry in Western Province.**

Mathiyalagan Dharshan<sup>1</sup> and Thirugnanasampanthar Sivapathaviruthayar<sup>2</sup>  
Department of project management, University of vavuniya, Sri Lanka  
[Dharshanjaagan34@gmail.com](mailto:Dharshanjaagan34@gmail.com)

### **Abstract**

This research explores the relationship between a Project Manager's Emotional Intelligence (EI) and project success in the IT industry in the Western Province. It focuses on four dimensions of EI: self-awareness, self-management, social awareness, and relationship management. The study aims to understand how these aspects of EI influence project outcomes. A sample of 100 IT professionals from the Western Province will be surveyed, with data analyzed using statistical methods to identify patterns and correlations. The research seeks to provide insights into the role of EI in the dynamic IT sector, offering practical implications for project management. By investigating the impact of a Project Manager's self-awareness, self-management, social awareness, and relationship management skills on project success, the study aims to uncover the subtle factors that drive successful project outcomes. The findings could guide organizations in enhancing EI among their project management teams, leading to better project performance. This study aligns with the increasing importance of soft skills in the professional world and aims to bridge the gap between emotional intelligence and project success in the IT industry of the Western Province.

**Keywords:** *IT Industry, Emotional intelligence, Project success*



## **Change management practices in Sri Lankan software development projects**

Tikiri Sandamini Lakshani Dahanayaka<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
lakshanidahanayaka213@gmail.com

### **Abstract**

The study investigates change management Practices in Sri Lankan Software Development projects. Using purposive sampling, ten individuals from eight organisations participated in software development project-change management processes. Through the Qualitative approach, the aim is to explore change management practices used in Sri Lankan Software Development projects and identify Challenges and essential Change Management practices in the software development industry in Sri Lanka. The researcher found the importance of a holistic approach to change management in the software development industry through interviews with particular individuals. The study suggests that software development companies should prioritise senior leadership commitment, invest in training programs, integrate change management into professional development, measure success through metrics, and adopt a user-centric approach to change evaluation. It also recommends establishing a communication plan, using transparency tools, and continuously improving communication practices. Key Performance Indicators (KPIs) should be defined to measure organisational change implementation.

**Keywords:** *change management, software development, information technology*



## **An exploratory study on virtual project management practices in it industry: Sri Lanka**

Bandara D.U.S<sup>1</sup> and Nanthagopan Yogarajah<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*ud.sathsarani@gmail.com*

### **Abstract**

This study provides a comprehensive exploration of virtual project management practices in the IT industry of Sri Lanka using a qualitative research approach. The study addresses a critical gap in the literature by offering context-specific insights into the challenges and opportunities associated with managing projects remotely with geographically dispersed teams. Through in-depth interviews with key stakeholders within the Sri Lankan IT industry, the research uncovers the nuanced applications of project management practices throughout the project life cycle. The findings offer valuable insights, recommendations, and best practices that can enhance the effectiveness of virtual project management within this specific context, ultimately contributing to more successful project outcomes and improved project management strategies. The practical significance of this study lies in its potential to bring about positive social change by promoting more effective project management practices and the success of IT projects. Overall, this dissertation provides a valuable resource for both academia and industry professionals seeking to navigate the complexities of virtual project management in the IT industry of Sri Lanka.

**Keywords:** *IT Industry, project management practices, Project Life Cycle, virtual project management practices, virtual environment*



## Exploring the knowledge management practices in non-governmental organizations in Sri Lanka

Thuvaraka Ithayarasa<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*thujavinoth18@gmail.com*

### Abstract

This study examines how Non-Governmental Organizations (NGOs) in Sri Lanka (SL) use knowledge to tackle critical societal issues. It focuses on understanding how these organizations create, store, share, and use knowledge to improve their effectiveness. The research uses qualitative methods such as surveys, interviews, and case studies to examine the current techniques, challenges, and success factors in Knowledge Management (KM) within these NGOs. The main goal is to help NGOs develop better KM practices tailored to their needs, enabling them to effectively balance donor expectations, societal needs, and internal capabilities. The study finds that explicit (documented) and tacit (unwritten, experiential) knowledge flows are crucial and identify areas where current KM practices can be improved. By promoting a more strategic approach to KM, this research aims to support NGOs in SL in adapting to the changing needs of the communities they serve.

**Keywords:** *explicit knowledge, knowledge management, obstacles, strategic approach, tacit knowledge*



## **Study on the factors affecting knowledge sharing Sri Lankan IT industry**

Jayamini Gunasekara<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*jayaminilavindya@gmail.com*

### **Abstract**

Several researchers have proven, with evidence, that Information technology projects often fail, and the brain drain is one of the causes. Today, skilled professionals' employee turnover is identified as the major challenge faced by the information technology industry, and it will lead to projects failing because the success of Software depends on team collaboration. Past researchers highlight a clear link between project knowledge and performance. This study focused on the factors influencing knowledge sharing on software or information technology projects: co-worker congruence, team communication, rewards, trust, organizational culture, technical support, participative decision-making, and the relationship between knowledge sharing and project performance and success in the Sri Lankan software industry. This research used thematic analysis of the qualitative research approach. The study addresses a critical gap in the literature. The sample comprised five software companies in the Colombo district, and from each company selected, a minimum of three employees worked on the software projects. So, fifty respondents were selected as a sample for this study, and data was collected through semi-structured interviews and focus group discussions. The results of data collected from fifteen employees of Information technology companies in Colombo indicated that Findings indicate that there is a high level of responses to the practices mentioned above documentation, Pair programming, Furthermore, the findings indicate that co-worker congruence. Understanding the factors influencing knowledge-sharing practices can help organizations create supportive environments that encourage collaboration, innovation, and continuous learning.

**Keywords:** *IT project management, influence factors for knowledge sharing, knowledge sharing, knowledge sharing practices, project success*



Track 02:

**Human trafficking, Safe Migration and Disaster Management**





## **Impact study of the wind power project: Case study of Vallibel Wind Farm Rathnapura district**

Dayananda P. B<sup>1</sup> and Mathivathany Sasitharan<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*prababuddi@gmail.com*

### **Abstract**

This research provides a detailed assessment of the Vallibel Wind Farm (VWF) project in Rathnapura, Sri Lanka, and evaluates its various impacts on social development, the environment, and the economy. The research seeks to overcome current gaps in understanding the project's impact on local communities' socio-economic and environmental issues, focusing on the larger context of sustainable energy. As part of Sri Lanka's renewable energy ambitions, the VWF project calls for in-depth research to inform policymakers, stakeholders, and the public, providing both potential and issues. This research aims to fulfil the main objective of analyzing the socio-economic and environmental impacts of the VWF project in Rathnapura district. Specific objectives include examining the environmental consequences, economic benefits, and social consequences of wind farms in the region. The study strategy is exploratory and uses qualitative data collection methods, mainly interviews, to obtain rich information regarding the project's impact. Thematic analysis is applied to data analysis, providing a comprehensive knowledge of socio-economic and environmental aspects. The findings emphasize the need to recognize energy development projects' direct and indirect implications, underscoring the relevance of global efforts such as the VWF. This research helps make informed decisions by understanding the positive and negative impacts influencing future sustainable development efforts in Rathnapura district and beyond. The value of the study lies in its contribution to understanding the cultural, economic, and environmental implications of the VWF initiative.

**Key Words:** *sustainable energy, wind energy, environmental impact, social impact. economic impact*



# **A study on disaster management practices: a case study of the Guhagoda solid waste management project of Kandy Municipal Council**

Achani Nisansala<sup>1</sup>, and Mathivathany Sasitharan<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*achaninisansal@gmail.com*

## **Abstract**

Environmental degradation and subsequent disasters have heightened the urgency of effective disaster management within waste management contexts, particularly evident in the urban landscape of Kandy Municipality. The main purpose of this study is to apply Disaster Management Practices for Flood and Landslide Disasters Associated with Guhagoda Solid Waste Management Project. It is regulated by the Kandy Municipal Council (KMC). Until 1960, Guhagoda was utilized as a remote location to dispose of hospital garbage, then as a sewage disposal site, and lastly as a location to dispose of all waste produced by the Kandy Municipal Council. Despite existing research on the Guhagoda Solid Waste Management Project, notably its environmental impacts, there remains a critical gap concerning disaster management practices specifically tailored to address the heightened risks of landslides, water and air pollution, and associated health issues. The Guhagoda dumping site initially repurposed with aid from the Japan International Cooperation Agency (JICA), has morphed into a primary disposal site for solid waste from Kandy and neighbouring regions, posing significant environmental and health hazards. As elucidated by Smith (2006), disaster management encompasses preparedness, Prevention, response, recovery, and mitigation practices. Guhagoda Solid Waste Management Project, by applying these disaster management practices, this case study shows how to manage the disasters that arise.

**Keywords:** *Solid Waste Management Project, Disaster Management Practices, Preparedness, Prevention, Response, Recovery, Mitigation.*



## **The Socio-economic and environmental impact of Thambapavani wind power project in Mannar district**

Posterdifan Prakcy Robina<sup>1</sup>, and Mathivathany Sasitharan<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*robina.posterdifan3@gmail.com*

### **Abstract**

The Mannar District wind power project has significant socio-economic and environmental implications, affecting the region's development trajectory. The project catalysis job creation, fosters local employment opportunities and skill development, and contributes to energy independence by reducing reliance on conventional energy sources. It also positions Mannar District as a potential hub for sustainable innovation and industrial growth. The wind power project is a beacon of renewable energy, reducing carbon emissions and curbing climate change's adverse effects. However, potential challenges, such as the ecological footprint during construction and the need for careful wildlife management, must be acknowledged. Despite these challenges, the overall environmental benefits of wind power in Mannar District will likely outweigh the drawbacks, positioning the region as a leader in sustainable energy practices. Community engagement is crucial for the success of any sustainability project, and the project's environmental impact assessment should consider its economic viability and ecological sustainability over time. By prioritizing community engagement, encouraging local development, and implementing environmentally friendly practices, the project can serve as a model for sustainable energy initiatives and lead the region towards a cleaner and more resilient future.

**Keywords:** *environmental implications, sustainability, wind power, socio-economic and environmental impact*



## **Human trafficking of Sri Lankan ex-soldiers to Ukrainian war: Implications for Sri Lanka**

Sathuthika Sasikumar<sup>1</sup>, and Thirugnanasampanthar Sivapathaviruthayar<sup>2</sup>

Department of Project Management, Faculty of Business Studies,

University of Vavuniya, Sri Lanka

[sathurshikasasikumar@gmail.com](mailto:sathurshikasasikumar@gmail.com)

### **Abstract**

The country's failure to create employment opportunities in Sri Lanka following the recent economic downturn in 2022 forced the public, regardless of their skill level, to leave the country for their survival or prosperity. The prevalence of higher unemployment has opened the opportunities for booming human smuggling, trafficking and illegal migrations. Many reports in recent days have spotted the human smuggling of ex-soldiers of the country fighting in Russian or Ukrainian forces after the Russian invasion. Against the promises of lucrative, non-combat jobs, the veterans are engaged in the fighting, against their willingness and desperate to come back home. Reports state that at least 2,000 Sri Lankan ex-soldiers enlisted on both sides of the Ukraine war, including in the regular armed forces and mercenary groups. Human trafficking is a grave violation of human rights that involves the exploitation of individuals through force, deceit, fraud, or coercion for profit. Ending human trafficking is essential for safeguarding human rights, promoting social justice, and ensuring global security. Therefore, this study aims to examine how ex-soldiers are attracted and deceived by human traffickers, what measures are taken by the government to stop the trafficking, and how the government strives to get the willing ex-soldiers home. It also investigates the specific political/ diplomatic, social, and economic effects in Sri Lanka. Understanding these issues is vital for creating effective counter-trafficking and smuggling measures and protecting the rights of at-risk populations in Sri Lanka. The researcher adopted a qualitative method with secondary data to attain the research objectives. Several factors have contributed to the rise of human trafficking and continuous awareness; creating employment opportunities, tracking and banning traffickers, and diplomatically collaborating with the Russian and Ukrainian governments will reduce the suffering.

**Keywords:** *human trafficking, human trafficking for Russian-Ukrainian war, human rights*



## Human Trafficking for Sexual Crimes

Thurkka Thevakumar<sup>1</sup>, and Mathivathany Sasitharan<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*Thurkgathev0818@gmail.com*

### Abstract

Human trafficking involves the recruitment, transportation, harboring, or receipt of people through force, fraud, or coercion for exploitative purposes. Sexual exploitation is one of the most prevalent forms of trafficking. Sex trafficking for sexual exploitation is a grave issue worldwide, including in Sri Lanka. Sex trafficking in Sri Lanka is a significant concern. The country serves as both an origin and transit point for victims. Victims are often coerced, deceived, or forced into prostitution, pornography, or other forms of sexual exploitation. Traffickers exploit vulnerabilities such as poverty, lack of education, and social isolation. Perpetrators and their network abduct men, women, and children from Sri Lanka to various destinations, including the West, South East, South Asian countries, and Europe. These victims are subjected to commercial sexual exploitation and forced labor. Further, the domestic network also operates to lure women and girls for sexual crimes under the guise of commercial work opportunities, such as employment in garments and massage centers in the cities, many miles away from their hometowns. The United Nations Convention against Transnational Organized Crime (Palermo Protocol) addresses human trafficking. It aims to prevent, suppress, and punish trafficking offences. This research aims to explore the prevalence and pattern of human trafficking for sex workers in the country, its vulnerability, causes, effects, and preventive measures taken by the relevant government and non-government organizations. It adopts a qualitative method with published documents with the aim of future primary research.

**Keywords:** *human trafficking, human trafficking for sexual crimes, human rights, sex trafficking*



## Human Trafficking for Cyber Slavery and Crimes

Ranush Dilshan. A. O. M<sup>1</sup>, Anjana Appuhami M.A.D.S<sup>2</sup> and Ajitha Silvester<sup>3</sup>

Department of Project Management, Faculty of Business Studies,

University of Vavuniya, Sri Lanka

[ranush.d98@gmail.com](mailto:ranush.d98@gmail.com)

### Abstract

Human trafficking is a punishable offence under the Penal Code of Sri Lanka. Trafficking can take various forms, including forced labor and sexual exploitation. Vulnerable groups, such as women and children, face risks due to deceptive or coercive tactics used by criminal networks. Economic crisis induced by a lack of manufacturing and exports, corruption, debt burden, and the failure of mega projects multiplied the unemployment in the country and forced people to leave the country for employment opportunities for their and their family survival. Human traffickers exploited the situation in Sri Lanka. Sri Lankan migrants were trafficked to Myanmar for cyber scamming activities. They were promised legitimate IT and customer service jobs but ended up being exploited. It is believed that at present, nearly fifty-five Sri Lankans, including both males and females, have been trapped in the area called Golden Triangle, bordering Myanmar, Thailand and Laos, and nearly 5000 US dollars have been demanded by the Chinese running the cybercriminal area. Sri Lanka established a new Human Trafficking, Smuggling Investigation, and Maritime Crimes Division within the Criminal Investigation Department (CID) to combat trafficking crimes, and this division is more accessible for potential victims to report complaints. This study strives to explore the background and gravity of the recently shocked human trafficking incidents in the country for cybercrimes from outside of the country through desk research for future primary research to raise awareness among university students.

**Keywords:** *human trafficking, cyber-crimes, cyber slavery, human trafficking for cyber crimes*



## Child Trafficking and Baby Farming in Sri Lanka

Bandara. D. U. S<sup>1</sup>, and Sharangi Sasitharan<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
[ud.sathsarani@gmail.com](mailto:ud.sathsarani@gmail.com)

### Abstract

People under the legal age of eighteen are called "children" nationally and internationally. United Nations Office on Drugs and Crimes reports that child trafficking has significantly increased on a global scale. One in three victims of human trafficking are children, and they are the victims of trafficking are recruited, transported, transferred, harboured or received for exploitation. They may be forced to work in sweatshops, on construction sites or in houses as domestic servants; on the streets as child beggars; in wars as child soldiers; on farms, in travelling sales crews or in restaurants, hotels, and brothels and strip clubs or for escort and massage services. They are the worst abuses of children's rights; child trafficking is a violent crime that targets children and is a terrible practice that keeps growing both domestically and internationally. Child trafficking is an international issue that affects all nations - a global phenomenon. Baby Farms were the centres operated as businesses, arranging babies for adoption; mothers would stay there until giving birth, and then the babies were sold. The broker facilitated adoptions for foreign parents. Coercion and financial desperation led some mothers to give up their children through legal or illegal adoptions. Efforts are ongoing to uncover the truth and address the trauma caused by baby farming. While not all cases directly involve trafficking, the sale of babies for adoption can intersect with human trafficking, and vulnerable mothers, financial pressures, and lack of options contribute to this complex issue. The main objective of the study is to explore the pattern of child trafficking in Sri Lanka through qualitative secondary data collection. The current economic condition has drastically affected the living standards of many Sri Lankans and has enhanced the threat of child trafficking.

**Keywords:** *human trafficking, child trafficking, baby farming, child rights, human rights violation*



## **Track 03: Modelling Project Complexity**





## **The challenges in implementing project triple constraints in the apparel industry in the Colombo district**

Dashika Chandraratne<sup>1</sup>, and Mathivathany Sasitharan<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka

*dashirathwatte98@gmail.com*

### **Abstract**

This study examines the challenges faced by the Apparel Industry in the Colombo District of Sri Lanka in implementing the Project Triple Constraints of scope, time, and cost during the current economic crisis. The Triple Constraints framework is essential for successful project management but becomes complicated in unstable economic conditions. The economic situation in Sri Lanka, marked by high inflation and currency devaluation, has worsened these challenges. The main goal of this study is to identify the specific difficulties in implementing the Triple Constraints due to the economic crisis in Sri Lanka. The study uses a qualitative approach to gain a deep understanding of these issues. One significant finding is that apparel companies are dealing with disrupted supply chains. Local economic instability causes delays and unpredictability in receiving necessary materials, making it difficult for companies to stick to planned project scopes and timelines. Fluctuating material costs are another significant challenge. Price volatility, driven by inflation and currency depreciation, makes budgeting difficult. This financial uncertainty leads to budget overruns and affects the financial health of the Apparel production. Labor shortages add to the problem. Economic difficulties have led to workforce reductions and migration, creating a lack of skilled labor. This shortage reduces productivity and quality, making it hard to meet project deadlines and maintain the quality of products. By addressing these challenges, this study highlights the need for the apparel industry in Colombo to adopt more flexible and adaptive management strategies. Successfully tackling these issues can help ensure better project management, promoting sustainability and growth despite economic challenges.

**Keywords:** *apparel industry, Colombo district, economic crisis, project triple constraints*



## **Impact of Kanban practices on project management performance of the construction industry**

Dimuthma Umashani, K. A<sup>1</sup> and Thirugnanasampanthar  
Sivapathaviruthayar<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
[dimuthmaumashani98@gmail.com](mailto:dimuthmaumashani98@gmail.com)

### **Abstract**

This research paper explores the impact of Kanban practices on construction project performance in the Colombo district, Sri Lanka. The study investigates the relationship between six critical kanban practices: visualizing the workflow, limit work in progress, measure and manage flow, make process policies explicit, implement feedback loop, improve collaborative evolve experimentally and construction project performance by using quantitative methods and survey strategy. Data was collected via an online questionnaire distributed among project management professionals in construction firms, utilizing a simple random sampling approach. Findings reveal significant associations and impacts between Kanban practices and construction project performance, indicating the efficacy of Kanban methodologies in enhancing efficiency, timeliness, quality, safety, stakeholder satisfaction, and cost management. Recommendations include tailoring Kanban practices to specific organizational contexts and fostering a collaborative environment aligned with project needs. Future research avenues include exploring the adaptability and scalability of Kanban methodologies across different construction project types, integrating advanced technologies for enhanced decision-making, and investigating the influence of organizational culture and leadership styles on Kanban implementation. This research advances knowledge on Kanban's applicability and impact in the Sri Lankan construction industry.

**Keywords:** *Kanban, construction project performance, work in progress, collaborative evolve experimentally.*



## **Issues and Challenges in Scrum Methodology Implementation in Sri Lanka Software Projects**

Jinoshanth P<sup>1</sup>, Nanthagopan Yogarajah<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka.  
*jshanth82@gmail.com*

### **Abstract**

Scrum methodology is widely used in software development, among other methodologies software development teams use. Previous studies have found that there is an Introduction and theories of scrum, Advantages of using scrum methodology, Challenges related to scrum methodology globally, roles of scrum, Factors that hinder the use of scrum methodology in software sectors, Realistic of agile and scrum methodology usage in Sri Lanka. In this section, the researcher has decided to conduct research in Sri Lanka about the Issues and Challenges in Adopting Scrum Methodology in Software Development Projects in Sri Lanka and how to overcome these challenges practically. The researcher uses qualitative methods to collect and evaluate the data in this research. This approach investigates the issues and challenges in adopting scrum methodology in software development projects in Sri Lanka. For this study, the researcher has chosen five software companies in Sri Lanka to conduct a case study among ten respondents to explore the issues related to Scrum Methodology adoption in Sri Lankan Software Companies. From this research, the researcher has found issues in practising scrum methodology in Sri Lankan software companies. Moreover, this study shows that by finding solutions to these issues, scrum can be effectively used to achieve successful project outcomes.

**Keywords:** *Daily scrum, Development team, Software Development, Scrum, Scrum Master*



## The influence of artificial intelligence on project management knowledge areas in IT industry

Dhanushika. S<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
[dhanushikasris23@gmail.com](mailto:dhanushikasris23@gmail.com)

### Abstract

This study delves into the integration of Artificial Intelligence (AI) in IT project management within Sri Lanka's Western Province, focusing on the dynamic interaction between AI and the ten Project Management Knowledge Areas (PMKAs) defined by the Project Management Institute (PMI). Through in-depth interviews with ten expert project managers and IT professionals, this research examines how AI influences various PMKAs and their broader implications for the industry. The findings reveal that AI significantly enhances PMKAs involving historical data analysis and repetitive tasks, such as communication, stakeholder engagement, scheduling, and resource management. AI optimizes workflows, improves decision-making, and enhances communication within project management tools like Trello, Google Bard, and ChatGPT. Conversely, areas that heavily rely on human skills, such as scope and procurement management, show minimal AI impact due to their dependence on human judgment and interactions. Despite these advancements, significant challenges remain, including data privacy concerns, resistance to change, and ethical issues. The study provides several critical recommendations for project managers to navigate these complexities: identify problems that AI can effectively solve, prioritize user training, adopt human-centric approaches, ensure ethical and legal compliance, and focus on future skill development. In conclusion, while AI significantly augments project management capabilities, the human element remains indispensable. AI will not replace project managers but will evolve their roles, enabling them to co-create project success with AI. This research offers valuable insights for IT professionals and researchers, providing a roadmap for adapting and thriving in a landscape where AI and human expertise interweave to redefine the future of project management.

**Keywords:** *Artificial Intelligence, Project Management, AI Integration, IT Industry.*



## **Dynamic project management capabilities and business model digitalization in manufacturing organizations**

Pihille Gedara Nadeesha Tharangani Wijethunga<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*Wijethunganadee@gmail.com*

### **Abstract**

In today's fast-paced business environment, manufacturing organizations face increasing pressure to transform their business model to stay competitive. Project management capabilities are related to the successful implementation of new business models. The main objective of the research is the association between Dynamic Project Management and business model digitalization: The study wants to know what it means to do flexible project management significantly when businesses are changing and using digital methods. This study utilized the quantitative approach, consisting of a systematic survey. This research study comprised a sample of 100 employees working in the selected manufacturing companies already implementing the business model digitalization project. This research provides insights into the association between project management capabilities and business model digitalization in manufacturing organizations. The findings can help manufacturing organizations improve their project management capabilities and increase the likelihood of successful business model digitalization.

**Keywords:** *dynamic project management capabilities, business model digitalization projects, successful implementation of business model digitalization*



## Client influence on agile project success in the Sri Lankan Software industry

Yadharshika Selvaraj<sup>1</sup>, and Nathagopan Yogarajah<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*yadharshika@gmail.com*

### Abstract

This study explored the complicated nature of client influence on the success of Agile projects in the dynamic software industry of Sri Lanka. With the growing importance of Agile methodologies in software development, it was critical to comprehend the complex effects of client feedback on project results. The study aimed to investigate the tactics, difficulties, and cooperative methods used by Agile project teams in Sri Lanka to successfully manage client influence. The research aims to understand the complex interactions between development teams and clients in this cultural and business context through an in-depth study of Agile project management techniques, client engagement models, and team dynamics. The present study sought to contribute valuable insights that can inform best practices, improve client satisfaction, and ultimately elevate the success of Agile projects in the software industry of Sri Lanka by looking at real-world scenarios and utilizing the experiences of Agile practitioners in Sri Lanka. The study's conclusions could benefit the regional software sector and advance knowledge of Agile project management in various international contexts.

**Keywords:** *agile project management, client influence, client satisfaction, software industry of SL, team dynamics*



# The effects of project management information systems on decision-making in managing projects of NGOs in Eastern Province

Ibraheem Mohammed Manasir<sup>1</sup>, and

Thirugnanasampanthar Sivapathaviruthayar<sup>2</sup>

Department of Project Management, Faculty of Business Studies,

University of Vavuniya, Sri Lanka

*Mohamedmanasir002@gmail.com*

## Abstract

The study explores NGOs' challenges in project management and investigates how the research evaluates PMIS integration, data accessibility, communication channels, and reporting mechanisms. Additionally, it assesses PMIS's role in enhancing collaboration among stakeholders. The findings contribute valuable insights to academia and practical NGO applications, informing project management practices and technology-driven decision support. Project Management Information Systems (PMIS) are crucial in improving project management effectiveness. However, there remains a significant knowledge gap regarding how PMIS directly influence decision-making within non-governmental organizations (NGOs), particularly in the unique context of the Eastern Province. Despite earlier research emphasizing PMIS's importance in project management, little attention has been given to its impact on NGO decision-making. Given the opportunities and challenges in the Eastern Province, a thorough investigation into PMIS's effect on decision-making is essential for maximizing community-driven project impact and optimizing management techniques. This study aims to bridge the knowledge gap regarding how Project Management Information Systems (PMIS) impact decision-making in NGOs within the Eastern Province. The study proposes practical recommendations to enhance decision-making processes for NGOs, policymakers, and researchers. These strategies leverage PMIS strengths and weaknesses to maximize positive impact, allocate resources effectively, and improve overall sector performance. Policymakers and researchers are encouraged to adopt these evidence-based insights, fostering a more efficient and impactful future for all stakeholders involved.

**Keywords:** *the effects, project management information systems, decision making, NGOs*



## **Study on social safeguard management measures on Kandy multimodal transport terminal project**

Mahakumbure Gedara Danoji Kavindi Sandeepika Mahakumbura<sup>1</sup> , and  
Mathivathany Sasitharan<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*sandeepikamahakumbura@gmail.com*

### **Abstract**

Social safeguards are used to reduce social disparities in current development projects. It increases the performance of the project and the disparities that may arise in society because the project can be identified early, and solutions can be provided to them. There are three main parts under risk management: risk identification, risk mitigation, and risk prevention. Studying social safeguard management aims to ensure that development projects and programs do not harm people and the environment. Social safeguard management involves identifying, assessing, and addressing the potential social risks and impacts of development interventions such as infrastructure projects, land acquisitions, or policy reforms. The key objectives of social safeguard management are to protect the rights, livelihoods, and well-being of affected communities, identify social risks and impacts associated with development interventions, minimize or prevent negative impacts and enhance positive impacts of the project, increase stakeholder engagement, participation, and consultation throughout the project cycle. Studying social safeguard management is essential for development practitioners, policymakers, and researchers to ensure that development interventions contribute to sustainable development and social justice to make correct decisions. Data was gathered from 20 vendors who resettled due to the Kandy Multimodal Transport Terminal Project in the Central province. The qualitative data was collected through interviews. Thematic analysis was used to analyze the data. The study found that social safeguard management measures were used in the KMTT project. Additionally, the study's results can be applied to future projects.

**Keywords:** *safeguard, social safeguard management, social safeguard management measures, KMTT project*





## **A study on project management practices on project life cycle in Manufacturing Industries**

Muleffersh Fathima Shehla<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>

Department of Project Management,  
Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*Shehlfathima7@gmail.com*

### **Abstract**

This research explores project management practices in manufacturing industries in Ibbagamuwa, Kurunegala, specifically focusing on the application of project management methodologies throughout the project life cycle. Using a case study approach, the study examines how project management practices are applied across various manufacturing sectors, organized according to the five stages of the project life cycle: initiation, planning, execution, monitoring and control, and closure. The research compares these practices across different sectors, identifying common strategies and methodologies used at each stage. By analyzing these practices, the study aims to uncover best practices that contribute to improved project management outcomes. The findings are intended to offer valuable insights into how project management processes can be optimized, leading to more efficient project execution and better overall results within the manufacturing industry. Through this investigation, the research contributes to a deeper understanding of effective project management strategies, providing practical recommendations for manufacturers to enhance their project management efficiency and align their practices with industry standards. Ultimately, the research seeks to improve the overall performance of manufacturing projects in Ibbagamuwa, fostering better project delivery and organizational success.

**Keywords:** *Project Life Cycle, Manufacturing Industries, Best Practices, Project Management Practices*



## Applicability of project management performance domains for agile-developed IT projects

Tharan Thuraisinkam<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*thuraisinkamtharan@gmail.com*

### Abstract

The Project Management Institute's PMBOK Guide, specifically its 7th Edition, presents 12 project management principles and eight performance domains essential for project success. Agile methodologies have transformed IT project management over the past two decades, emphasising iterative and collaborative processes. This study explores the applicability of PMBOK's project management performance domains (PMPD) to agile-developed IT projects and assesses the alignment between PMPD and the agile concept, identifies challenges and opportunities in PMPD implementation, and examines technological, organisational, and environmental factors affecting PMPD's application in agile IT contexts. The researcher collected data through semi-structured interviews with ten participants from Sri Lanka's IT industry, who are agile IT practitioners with knowledge of PMBOK 7th Edition and experience in agile IT projects and analysed thematically. The findings reveal that PMPD theoretically aligns well with agile values and principles. However, when practical challenges include criticisms of PMBOK's rigidity and contradictions between PMBOK and agile approaches, opportunities lie in tailoring Consideration, Practice of Assessment and Alignment, and use as general guidelines. It emphasises the need for adaptability, applicability, and practical focus from a technological perspective; organisational readiness, communication processes, management and decision-making from an organisational perspective; and alignment with competitive and external pressures and existing practices from an environmental perspective. Recommendations include using PMPD as guidelines rather than rigid frameworks, customising PMPD for agile projects, employing methodical project selection, and implementing effective change management processes.

**Keywords:** *PMBOK 7th Edition, Project management performance domains, agile value, agile principle, TOE framework*



## **Track 04: Project Leadership**



## **Employee retention strategies and practices in the construction industry in Sri Lanka**

Sarojani Selambram<sup>1</sup>, and Thirugnanasampanthar Sivapathaviruthayar<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*Selambaramsarojani@gmail.com*

### **Abstract**

This study focuses on the construction industry's challenges in retaining employees due to its hazardous workplace. Understanding employee expectations is crucial for enhancing retention rates and improving operational efficiency, especially in the construction sector, which faces significant challenges in recruiting and retaining top talent. This research aims to analyze the retention strategies and practices adopted within construction firms, focusing on their efficacy and benefits for both project and non-project employees. The study explores the effectiveness of these strategies in bolstering company performance and employee satisfaction. Additionally, it investigates the challenges associated with implementing these retention strategies and proposes solutions to overcome them. The research adopted a qualitative methodology to investigate diverse strategies and practices utilized in employee retention within the construction industry across ten construction firms in Sri Lanka. The data collection procedure encompassed interviews with upper management representatives and focus group discussions with laborers at various construction sites. The study culminated in analyzing distinct organizational viewpoints on employee retention, unveiling a spectrum of strategies employed by these entities. The conclusions drawn from this research are contingent upon the varying perspectives of different organizations within the industry. These conclusions shed light on organizations' diverse employee retention strategies and approaches. These recommendations aim to address the needs and expectations of the workforce, fostering a more conducive environment for employee retention within the construction sector.

**Keywords:** *employee retention, employee retention in the construction industry, employee retention strategies, employee retention practices*



## **Virtual reality for client satisfaction in construction projects: a stakeholder-centric approach**

Emalda. J. V<sup>1</sup>, and Thirugnanasampanthar Sivapathaviruthayar<sup>2</sup>

*Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka,  
emaldajockimfarnando@gmail.com*

### **Abstract**

This study examines the relationship and impact between virtual reality usage and client satisfaction among construction project stakeholders. A quantitative approach was implemented, utilizing a questionnaire survey distributed to 100 respondents from the construction field. The survey included measures of virtual reality elements, such as satisfaction of use and types of technologies utilized, as well as validated variables to assess client satisfaction, including virtual environment, virtual presence, sensory feedback, and interactivity. The client's unmet needs are the major problem; there is variance in how the client explains it and how the project manager and team understand it. This research features a virtual presentation in which the client can enter into the virtual project environment and make sure to make changes in the project as per their expectations before the project begins by using virtual reality. The goal of this research is to assess the influence of virtual-based project management on the satisfaction of clients. A Google form was used to collect data from a random sample. The collected data was then analyzed to see its impact on each component. The data were analyzed using correlation and regression analysis methodologies employing IBM SPSS's analytical capabilities. The researcher was able to determine by analyzing the relationship and impact of VR-based project management on the satisfaction of clients by applying projects in the construction industry, according to the analysis completed after the study. The research sector will be encouraged to use VR-based project management to satisfy clients as a result of the findings of this study. In future, it may be used as an innovative tool in the process of knowledge areas in project management.

**Keywords:** *client satisfaction, virtual environment, virtual presence, sensory feedback, interactivity*



## **Track 05: Risk Management**



## Study on risk management practices of the central Expressway construction project in Sri Lanka

Harshika Sewwandi Jayalath<sup>1</sup>, and Mathivathany Sasitharan<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*harshikajayalath98@gmail.com*

### Abstract

The Central Expressway (CE) construction project in Sri Lanka aims to enhance the transportation network and stimulate economic growth but faces risks like delays, cost overruns, and compromised quality. This study fills a literature gap on practical risk management practices in Sri Lankan infrastructure by examining the CE project's RMP. Drawing on Chapman and Ward's and Hillson and Murray-Webster's frameworks, it assesses risk identification, assessment, and mitigation, integrating covariate variables. Using a quantitative approach with a survey of 191 stakeholders and SPSS analysis, the study tests hypotheses on risk management's impact on project performance. Results show that risk identification, mitigation, and stakeholder engagement significantly influence performance, explaining 78% of its variance. Effective risk assessment recognizes technical, financial, environmental, and geopolitical risks. Timely mitigation minimizes delays and cost overruns. Stakeholder engagement, especially in decision-making, is crucial for success. The findings suggest a dynamic risk management approach, enhanced stakeholder engagement, and comprehensive contingency planning. This research advances the theoretical understanding of risk management in large-scale projects and offers practical insights for project managers and policymakers. However, the work is not done. Future research should explore comparative analyses across projects and industries to identify transferable practices to improve risk management effectiveness and promote sustainable development in Sri Lanka, emphasizing the urgent need for continuous improvement in risk management practices.

**Keywords:** *central expressway, construction projects, infrastructure projects, risk management practices, Sri Lanka*



## **Track 06: Sustainability Project Management**





## Quality management practices in developing projects in the Colombo district

Kaushalya Rathnasiri<sup>1</sup>, and Mathivathany Sasitharan<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*Kaushalyarathnasiri1@gmail.com*

### Abstract

This study investigates the implementation and impact of quality management practices in developing projects within the Colombo District. The research aims to identify the critical quality management techniques employed and evaluate their effectiveness in enhancing project outcomes. Through a mixed-methods approach, including surveys and interviews with project managers, contractors, and stakeholders, the study examines the adoption of international quality standards, such as ISO 9001, and their adaptation to the local context. The findings reveal that while many projects strive to adhere to global quality benchmarks, there are significant challenges related to resource constraints, lack of skilled labour, and insufficient training. Additionally, the study highlights the importance of continuous improvement processes, stakeholder engagement, and risk management in achieving project quality. Case studies of successful projects demonstrate that proactive quality planning, regular audits and feedback mechanisms are critical for maintaining high standards. The research also underscores the role of government policies and regulatory frameworks in shaping quality management practices. Recommendations include the need for enhanced training programs, increased investment in quality management systems, and the development of localized guidelines that cater to the specific needs of projects in the Colombo District. The study concludes that while there is a growing awareness of the importance of quality management, a more concerted effort is required from all stakeholders to overcome existing barriers and ensure the consistent delivery of high-quality projects. This research contributes to the broader discourse on quality management in developing regions and provides actionable insights for improving project performance in Colombo.

**Keywords:** *Quality Management, Project Management, Quality Management Practices, Project Quality, Colombo District, Developing Projects, Improvement, Process*



## **Project Management Competencies for Regional Development: Case Study from Daduru Oya Reservoir Project.**

Wathsala Munasinghe. M. A. S<sup>1</sup>, and Mathivathany Sasitharan<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka.

[wathsalamun999@gmail.com](mailto:wathsalamun999@gmail.com)

### **Abstract**

This study delves into project management competencies crucial for regional development, using the Daduru- Oya reservoir project as a case study. The research underscores the multifaceted nature of regional development initiatives, emphasizing the importance of technical, contextual, and human/behavioural competencies. This research has collected qualitative data by selecting twelve people among the project managers, assistant project managers, and technical officers who worked in the Daduru Oya Reservoir Project using the convenient sampling method. Interviews were used to collect the data, and the data were analysed thematically. Technical skills like risk management and timely prioritization are essential for meeting development goals, while contextual competencies such as stakeholder analysis and management are pivotal for garnering community support and ensuring regulatory compliance. Human/behavioural competencies, particularly effective communication and conflict resolution, drive project success while empowering delegation, fostering accountability and expediting execution. The study also highlights the significance of ethical and social considerations, integrating them into the "working with people" method. By emphasizing a comprehensive competency integration approach, this research aims to equip project managers with diverse skill sets for the successful and sustainable execution of regional development projects. Through the Daduru Oya Reservoir Project case study, this study demonstrates the harmonious balance between technical expertise, contextual understanding, and practical human and behavioural competencies, paving the way for informed decision-making and impactful regional development initiatives.

**Keywords:** *competencies, Daduru Oya Reservoir Project, Regional*



## **Integration management practices and project Success in the construction industry in Jaffna district**

Marie Vinothini Alphonsus<sup>1</sup> , and Thirugnanasampanthar  
Sivapathaviruthayar<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Srilanka  
*vinovinoalphonsus@gmail.com*

### **Abstract**

Project Integration Management is the first knowledge area of project management that focuses on the integration Management process throughout the project phases, from initiating to closing. This study explores project integration management practices and success in construction projects in the Jaffna district. This thesis considered a specific objective to explore Project integration Management practices in construction Projects and contribute the qualitative method and interview. Thematic analysis was used to analyze data. This study followed the convenience sampling method. The researcher interviewed eight participants for qualitative data and used thematic analysis to find themes. This study examines PIM practices and project success in construction projects, identifies PIM challenges, and discusses how to overcome those challenges. Here, the researcher conducted the study within the Jaffna district. Future researchers can follow the study for other districts. The researcher collected the primary data through structured interviews, observation, and brainstorming. This overall finding, the constructions constantly indicated several opinions. As a result of the constructions, the term "Integration Management Practices" is not well defined. Researchers find some critical success factors: cost, time, quality, satisfaction, management, security, technology, organization, environment, and resources. The researcher recommended through this research that constructions have enough knowledge about integration management practices. Some of the practices are not used in the construction. The research recommends that all PIM practices be essential for construction projects.

**Keywords:** *integration management, project success, project success criteria, project, project management*



## How do project schedule management practices support reducing delays in construction projects in the Kurunegal district

Piyumika Wijesena .U.L.H<sup>1</sup>, and

Thirugnanasampanthar Sivapathaviruthayar<sup>2</sup>

Department of Project Management, Faculty of Business Studies,

University of Vavuniya, Sri Lanka

[hirupiyumi01@gmail.com](mailto:hirupiyumi01@gmail.com)

### Abstract

Stakeholders and project teams must priorities the timely completion of construction projects. Delays in the schedule can lead to a decline in the quality of work and negatively impact the organization's reputation, resulting in lost revenue. The building construction industry in Sri Lanka has a growth rate of 4.4% as of June 2023, but the threshold is 50%, indicating a decline in growth rate. Project teams use project schedule management practices to improve the timely completion of projects. This study highlights how project schedule management practices can reduce delays in building construction projects in Kurunegala, Sri Lanka. Specifically, the study will focus on project schedule practices, identifying the best practices, challenges, and the proven detailed background of building construction delays in the region. The study explores various project schedule management, construction delay effects, and building construction types through literature and qualitative thematic analysis. Data codes were identified to cover the study objectives based on interviewee transcripts. The main themes are based on objectives and data analysed in the study under the sub-themes. They are the initiation, planning, execution, controlling and monitoring, and closing phases of project schedule management practices and existing project schedule management practices and their effectiveness, stakeholder satisfaction, and project schedule management challenges. The research covers construction organisations operating in Kurunegala, which is one of the most active construction areas in Sri Lanka. The study includes the participation of ten construction organisations, and the findings are discussed and compared briefly with the literature findings.

**Keywords:** *projectschedulemanagementpractices buildingconstructionprojectsinKurunegala, exiting project schedule management practices, project schedule management challenges*



## **Exploring the project management practices of micro, small, and medium entrepreneurs in Kandy, Sri Lanka.**

Wickramasinghe W. T. E<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>

Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
*Wickramasinghe.wgte@gmail.com*

### **Abstract**

This qualitative research explores the landscape of project management practices within the context of Small and Medium-Sized Enterprises (SMEs) in Sri Lanka, focusing on the Kandy district. The study involves one-on-one interviews with ten entrepreneurs from various industries, intending to unravel insights into awareness, implementation, barriers, and perceptions of practising project management in their enterprises. Findings indicate diverse awareness levels, with technology-driven industries exhibiting higher proficiency. Practical implementation of project management practices varies, revealing positive trends in technology sectors and a reliance on traditional methods among older entrepreneurs. Common barriers include limited knowledge and experience, challenges related to the availability and affordability of tools, and dissatisfaction with knowledge distribution. Entrepreneurs express diverse perceptions, with technology-based industries generally holding positive outlooks. Recommendations encompass tailored educational initiatives, industry-specific training programs, and improved resource accessibility. The study's limitations are acknowledged, including the small sample size and geographic focus. The implications suggest avenues for policy, education, and support structures within the MSME ecosystem, while future research areas envision expanded investigations and deeper insights into project management dynamics in Sri Lanka. This research, a valuable contribution, enhances our understanding of project management practices in the Sri Lankan MSME landscape and provides a roadmap for their improvement.

**Keywords:** *project management, entrepreneurship, entrepreneurial project management,*



## **A study on MEAL practices on community development projects in Mullaitivu district – special reference in public sectors**

Kirijana Palachchandren<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>  
*Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
kerijanakeri@gmail.com*

### **Abstract**

Many development efforts are implemented as Community Development Projects. Their unique nature and qualitative objectives raise a variety of tools and techniques used in CDPs. The study focuses on MEAL practices in CDPs in government sectors of Mullaitivu district. The researcher used a qualitative method for this study and collected data from twelve respondents in five selected organizations through interviews with open-ended questionnaires among project leaders, coordinators, managers, and development officers. The researcher found various MEAL practices in their assigned project, and when the researcher compared them with literature MEAL practices, they did not use participatory monitoring, risk assessment, logical framework, auditing, and lessons learned registers. Finally, the researcher suggests a strategic approach and includes integrating MEAL practices into project planning, focusing on capacity building, developing clear guidelines, utilizing technology for data collection and analysis, establishing a systematic review mechanism, involving local communities, fostering collaboration among stakeholders, allocating adequate financial resources, cultivating a continuous learning culture, improving their knowledge, and advocating for their integration into government policies. Finally, the researcher found those practices, mainly using tools such as meetings, communications, progress reports, daily diaries, webinars, and field visits. According to these, different CDPs used a variety of tools and techniques. Mostly, they used monitoring and evaluation practices but rarely used accountability and learning practices. So, these practices are essential to every community development project; they cannot identify their regular activities in field sessions.

**Keywords:** *accountability, community development projects, evaluation, learning, monitoring*



## Environment Analysis of Colombo International Financial City Development Project

Amarasinghe L.A.H.V<sup>1</sup>, and Nanthagopan Yogarajah<sup>2</sup>  
Department of Project Management, Faculty of Business Studies,  
University of Vavuniya, Sri Lanka  
[hirushaamarasinghe@gmail.com](mailto:hirushaamarasinghe@gmail.com)

### Abstract

The Colombo Port City Development Project in Sri Lanka, a significant urban expansion initiative, faces environmental concerns such as coastal erosion, marine pollution, and habitat destruction. This study takes a unique approach to addressing these concerns by conducting a comprehensive environmental analysis of the project, focusing on identifying ecological problems and their impacts. The main objective is to identify the environmental issues associated with the Colombo Port City Project and propose mitigation recommendations. The research explores specific ecological aspects to establish sustainability goals, such as carbon footprint, waste generation, and impacts on biodiversity and ecosystem services. Through this analysis, the study aims to gain a deeper understanding of the project's environmental implications and provide valuable insights for sustainable development initiatives. The study employs an exploratory research design using qualitative methods to investigate the ecological impacts of the Colombo International Financial City development project. By conducting interviews with ten experts and analysing primary and secondary data, the study aims to gain in-depth insights into the complex environmental context of the project. Purposive sampling was utilised to select participants, and thematic analysis will be employed to analyse the qualitative data collected. The research methodology ensures a rigorous and systematic approach, facilitating a comprehensive understanding of the environmental implications of the Colombo International Financial City project.

**Keywords:** *Colombo International Financial City development project, environmental analysis, environmental impact, environmental issues*

**Department of Project Management  
University of Vavuniya  
Sri Lanka**



<https://fbs.vau.ac.lk/pm/urspm-2024/>



0242223913



[urspm2024@vau.ac.lk](mailto:urspm2024@vau.ac.lk)

