



PROCEEDINGS

2ND UNDERGRADUATE RESEARCH SYMPOSIUM ON PROJECT MANAGEMENT - 2025 (URSPM)

30th of May 2025

Innovative Practices in Project Management

**Department of Project Management
Faculty of Business Studies
University of Vavuniya**



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PANEL 1- MODERATOR & SPEAKERS

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Message from the Vice Chancellor



It is with immense pride and heartfelt appreciation that I convey my warmest greetings to all participants of the Undergraduate Research Symposium on Project Management 2025 (URSPM 2025), organized by the Department of Project Management, Faculty of Business Studies, University of Vavuniya. This year's theme, "Innovative Practices in Project Management", captures the essence of an evolving global landscape, where adaptability and innovation drive success.

In this context, the symposium serves as a timely and meaningful platform for our undergraduate students to present their research, explore new frontiers, and contribute valuable insights to the discipline of project management. The University of Vavuniya remains firmly committed to fostering a culture of academic excellence, research innovation, and intellectual exploration. Initiatives such as URSPM 2025 reflect our dedication to nurturing the potential of our students and encouraging them to be active contributors to both national development and global progress. I commend the Department of Project Management and all members of the organizing committee for their efforts in making this symposium a reality. I also take this opportunity to congratulate the students whose work is being showcased. Your dedication to inquiry and learning is truly inspiring. I encourage you to continue exploring new horizons and embracing innovation in both your academic and professional endeavors. I hope this symposium offers an enriching and thought-provoking experience that leaves a lasting impact on all participants.

Senior Professor A. Atputharajah

Vice Chancellor

University of Vavuniya

Sri Lanka



Message from the Dean



It is with great pleasure that I welcome you to the Undergraduate Research Symposium on Project Management 2025 (URSPM 2025), hosted by the Department of Project Management, Faculty of Business Studies, University of Vavuniya. This second edition of the symposium builds upon the success of its inaugural event and reflects our continuous efforts to cultivate research competencies and academic excellence among undergraduates. With the theme ‘Innovative Practices in Project Management’, this symposium showcases our students’s dedication to tackling contemporary challenges and crafting creative, practical solutions. This symposium serves as a scholarly platform for final-year students of the Bachelor of Business management Honors in Project Management to present their research findings. Their work reflects a high level of intellectual discipline, analytical rigor, and a desire to make meaningful contributions to both academia and industry. Being the first faculty in Sri Lanka to offer a dedicated honors degree in project management, we take pride in seeing our academic vision come to life through initiatives like URSPM. The Department of Project Management, supported by committed team of academics and the dynamic engagement of the Project Management Club, continues to foster a strong research culture within the Faculty of Business Studies. I extend my sincere gratitude to the organizing committee, research supervisors, evaluators, and all contributors for their tireless efforts in making this event a success. Most importantly, I congratulate our student researchers on their scholarly commitment and encourage them to continue their pursuit of knowledge with purpose and enthusiasm. I hope this symposium sparks critical thinking, fosters collaboration, and inspires ongoing innovation in project management.

Professor. Y. Nanthagopan
Dean
Faculty of Business Studies
University of Vavuniya
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Message from the Head



I am honored to send my message on the Second Undergraduate Research Symposium on Project Management 2025 (URSPM 2025), centered on the theme “Innovative Practices in Project Management”. In today’s rapidly evolving environment, project management demands not only traditional expertise but also a forward-thinking approach that embraces innovation. This symposium underscores the crucial role of creative solutions, emerging methodologies, and advanced technologies in navigating modern project complexities. As the Head of the Department of Project Management at the Faculty of Business Studies, I acknowledge the critical role of undergraduate research symposium in cultivating these forward-looking perspectives. By inspiring students to embrace innovation, this event cultivates a mindset of experimentation, critical thinking, and continuous progress key attributes of future project leaders. Our department is dedicated to shaping graduates who are not only technically proficient but also agile, adaptable, and equipped to implement innovative strategies in real-world contexts. URSPM 2025 provides an excellent platform for students to showcase their research, exchange ideas, and engage in meaningful dialogue about the future of project management. I extend my deepest gratitude to the Dean of the Faculty of Business Studies, my colleagues, the PM Club, and the entire organizing committee for their tireless efforts in bringing this symposium to life. Special thanks also to our partners and sponsors whose support has been invaluable. To all presenters and participants, I wish a stimulating and rewarding experience. May this symposium inspire bold and collaborative innovation, fostering meaningful advancements in project management.

Mrs. S. Mathivathany
Head
Department of Project Management
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Message from the Convener



It is with great pride and honor that I present this message as the Convener of the Second Undergraduate Research Symposium on Project Management 2025 (URSPM 2025), proudly organized by the Department of Project Management, Faculty of Business Studies, University of Vavuniya, Sri Lanka. This year's symposium membranes the theme "Innovative Practices in Project Management". Building on the success of its inaugural event, URSPM 2025 reaffirms our commitment to fostering high-quality, contemporary research in the evolving field of project management. I firmly believe that the research presented here will inspire and motivate emerging scholars and graduates to contribute meaningfully to this discipline. I sincerely hope the diverse range of abstracts and presentations showcased here fosters stronger collaboration between undergraduates, academicians, and industry professionals, enriching our research community. My deepest gratitude goes to all the undergraduate authors whose dedication and hard work have made this symposium and its proceedings possible. I also extend heartfelt thanks to the reviewers of URSPM 2025 for their invaluable insights and prompt evaluation, which have greatly enriched the quality of this event. I also extend my deep appreciation to the Head of the Department and the organizing committee for their unwavering dedication, which has been instrumental in bringing this symposium to life. As the Convener, I am confident that the knowledge and innovations shared here will continue to strengthen the academic and professional landscape of project management. I invite all readers to actively engage with the authors, exchange insights, and offer constructive feedback that will shape the future of research in this dynamic field.

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Message from the Editor-in-Chief



It is with profound honor and enthusiasm that I present this message as the Chief Editor of the editorial board for the proceedings of the Second Undergraduate Research Symposium on Project Management 2025 (URSPM 2025), convened by the Department of Project Management, Faculty of Business Studies, University of Vavuniya, Sri Lanka, under the distinguished theme “Innovative Practices in Project Management.” the Book of Abstracts showcases exemplary research contributions from undergraduate scholars, spanning a diverse range of contemporary and forward- thinking project management disciplines. This symposium serves as a vital platform for cultivating academic rigor and intellectual curiosity among aspiring project management professionals. I am confident that these scholarly contributions will inspire future cohorts to pursue and advance high-quality research, seamlessly connecting theoretical foundations with practical innovations in project management. It is my aspiration that URSPM 2025 will continue to cultivate a collaborative environment where undergraduates and seasoned academics converge to enrich the discipline and address the evolving challenges of project economies on a global scale. I am confident that these scholarly contributions will inspire future cohorts to pursue and advance high-quality research, seamlessly connecting theoretical foundations with practical innovations in project management. I am equally grateful to the peer reviewers whose incisive critiques and timely evaluations have substantially enhanced the quality and scholarly value of the submissions. Furthermore, I acknowledge with deep gratitude the efforts of the organizing committee, whose dedication and coordination were key to the seamless execution of URSPM 2025. As Chief Editor, I encourage readers to engage with these works and share constructive feedback to foster the growth of future research in this academic community.

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Track 01: Agile Project Management



Exploring the Influence of Virtual Project Management Tools on Project Performance in INGOs in Northern Province, Sri Lanka

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Abstract

The use of Virtual Project Management (VPM) software is critical for improving project performance in international non-governmental organisations (INGOs). This study investigates the use of VPM tools, their impact, adoption problems, and the contextual factors that influence their success. A qualitative research approach was used, which included semi-structured interviews with 11 people from various INGOs. The thematic analysis found four major areas: (1) Current VPM Tools - widely used platforms such as Trello, Slack, Microsoft Teams, and Google Workspace support task management, communication, and resource coordination; (2) Impact on Project Performance - VPM tools enhance collaboration, streamline workflows, improve resource allocation, and strengthen project monitoring; (3) Adoption Challenges - INGOs face barriers such as technological limitations, resistance to change, financial constraints, and data security. Despite the limitations, the findings show that VPM technologies may transform project efficiency and communication. To maximise their benefits, INGOs must implement strategic interventions such as staff training, the use of cost-effective and scalable instruments, and customisation to meet regional and cultural requirements. Addressing these issues can improve INGOs' adaptation and operational efficiency in changing circumstances. This study adds to the expanding body of information on VPM in the non-profit sector by providing actionable recommendations for INGOs, policymakers, and project managers seeking to optimize technology-driven project management solutions.

Keywords: *Collaboration, INGOs, Project Performance, Technology Adoption, Virtual Project Management*



Empirical Research on Utilization of Agile Project Management for Establishing Scheduling Systems in Construction Industry

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Abstract

This study explores the use of Agile Project Management (APM) to enhance scheduling efficiency in Sri Lanka's construction industry. With increasing project complexity and delays, the need for flexible and adaptive scheduling has driven interest in agile methodologies. The research aims to evaluate APM's applicability, assess its impact on scheduling, identify implementation challenges, and propose strategies for effective adoption. Key practices such as iterative planning, Scrum, and Kanban are examined for managing construction schedules. The introduction highlights challenges in traditional scheduling and APM's potential to address inefficiencies. The literature review compares agile and traditional project management, explores global and local APM adoption, and identifies best practices in agile scheduling. The qualitative methodology includes interviews with five major construction firms in Sri Lanka's Western Province and thematic analysis of findings. The study reveals the adoption of iterative planning, real-time feedback, and agile tools, improving flexibility and responsiveness. Leadership support, continuous training, and an agile-friendly environment emerge as critical success factors. Benefits include enhanced stakeholder collaboration and proactive risk management, while challenges such as resistance to change and hierarchical barriers are acknowledged. Strategies for effective agile adoption, including leadership involvement, ongoing training, and hybrid project management models, are proposed to overcome these challenges. This research contributes to the growing body of knowledge on agile adoption in construction, particularly in Sri Lanka, aiming to improve project scheduling and management practices.

Keywords: Agile Project Management (APM), Sri Lanka's construction industry, scheduling efficiency, Iterative Planning, Scrum and Kanban, Leadership Support, Hybrid Project Management



Artificial Intelligent Applications for Resource Allocation in Sri Lankan Construction Projects

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Abstract

The construction industry in Sri Lanka faces persistent challenges in resource allocation, including inefficiencies, cost overruns, delays, and material wastage. These issues hinder project performance and efficiency, exacerbated by not successfully adopting advanced technologies such as Artificial Intelligence (AI). Globally, AI has proven its potential to optimize resource allocation through predictive analytics, automation, and data-driven decision-making. However, its application in Sri Lanka's construction sector remains underexplored. This study aims to evaluate the impact and effectiveness of AI in addressing resource allocation challenges within Sri Lankan construction projects. Using a qualitative methodology, data was gathered through case studies and semi-structured interviews with 10 professionals from five leading construction companies. The stratified sampling approach was used to select large construction companies that use advanced technologies. The findings mainly revealed critical resource allocation issues, such as inadequate planning, technological & competency gaps, and labor mismanagement, while highlighting the potential of AI in improving efficiency, cost savings, timeliness, and decision support. Barriers to AI adoption were also identified, including high implementation costs, lack of expertise, and resistance to change. The research emphasizes the need for strategic integration of AI through pilot projects, collaboration with technology providers, development of a centralized data management system, positive stakeholder engagement, gap analysis, and capacity building tailored to Sri Lanka's unique socio-economic and technological context. This study contributes to the growing discourse on AI in construction by providing insights into its benefits and challenges and offering practical recommendations for effective AI integration to enhance resource allocation practices and project performance in Sri Lanka's construction industry.

Keywords: *Artificial Intelligence (AI), Resource Allocation, Construction Industry, Project Performance, Technology Adoption*



Evaluating the Effectiveness of Agile Project Management Methodologies in Enhancing Software Project Outcomes in Sri Lanka

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Abstract

This research evaluates how Agile Project Management methodologies can enhance software project outcomes in Sri Lanka's expanding IT sector. Agile methodologies such as Scrum, Kanban, Extreme Programming, and Lean focus on iterative development, flexibility, and collaboration with customers, rendering them particularly suitable for fast-paced software settings. Although these methods are prevalent in international industries, there is limited empirical evidence regarding their effects within Sri Lanka's distinct cultural and organizational framework. This research employs a qualitative approach that includes interviews with IT professionals from 12 software firms in Colombo to evaluate the implementation, benefits, and obstacles associated with Agile methods using thematic analysis. The results indicate that Agile significantly improves project delivery timelines, product quality, customer satisfaction, and team collaboration. Nevertheless, several obstacles impede successful implementation, such as cultural resistance, hierarchical corporate structures, insufficient Agile training, and challenges in moving away from conventional project management styles. The research highlights the necessity of adapting Agile frameworks to better fit software firms by fostering a culture of flexibility in Sri Lanka, offering organized Agile training programs, and ensuring leadership support for Agile adoption. These results provide valuable insights for both academic communities and industry practitioners by filling the research gap and suggesting practical strategies for improving Agile application software sector in Sri Lanka. This study establishes a foundation for future research, aiding organizations in refining their project management practices and maximizing the advantages of Agile methodologies to achieve higher success rates in software development.

Keywords: *Agile Project Management Methodologies, Kanban, Lean, Scrum, Software Development Projects, XP*



Study the Integration of Generative Artificial Intelligence on Project Lifecycle in Software Development Projects in Sri Lanka

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Abstract

This study explores the integration of Generative Artificial Intelligence (AI) across the project lifecycle phases in Sri Lanka's software development sector. The primary focus is investigating how Generative AI influences decision-making and collaboration during initiation, planning, execution, monitoring, and closure. The research objectives include understanding the role of Generative AI in enhancing project management processes, identifying barriers to adoption, and exploring opportunities for its effective use. Using a qualitative research design; data were collected through semi-structured interviews with 12 professionals, including project managers, developers, and AI specialists, selected via purposive sampling. Thematic analysis was applied to derive insights into how AI supports key project activities such as feasibility assessments, resource optimization, risk forecasting, task automation, and real-time progress tracking. The findings indicate that Generative AI improves decision-making accuracy, streamlines collaboration among cross-functional teams, and enhances efficiency across all project lifecycle phases. However, resistance to change, skill gaps, and infrastructure limitations remain significant barriers. This study contributes to the literature by providing a detailed understanding of Generative AI's strategic role in software project management in Sri Lanka. It highlights actionable recommendations for overcoming adoption barriers, fostering innovation, and maximizing AI's potential to improve project outcomes. The results guide policymakers and industry practitioners aiming to integrate AI into project workflows effectively.

Keywords: Collaboration, Decision Making, Generative AI, Project Lifecycle Software Development.



Comparison Study of Project Management Software Usage for the Success of Information and Communication Technology Projects - Sri Lankan Context

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Abstract

The increasing complexity of information and communication technology (ICT) projects in the contemporary business environment highlighted the critical role of project management software (PMS) in achieving successful project outcomes. This study undertook a comprehensive comparison study to of Project Management Software usage for the success of Information and Communication Technology projects, specifically within the Sri Lankan context. The research employed a qualitative methodology to investigate how PMS tools influenced various project success metrics, including on-time delivery, adherence to budgets, quality control, and stakeholder satisfaction. The study focused on six prominent organizations in Sri Lanka that regularly engaged in ICT projects, with data collected from 12 key respondents, including project managers, team leaders, and developers. Semi-structured interviews were conducted to gain in-depth insights into their experiences with PMS tools, exploring both the benefits and challenges encountered during software implementation. Thematic analysis was used to identify recurring themes and patterns related to the use of PMS in different stages of project execution. The findings suggested that the adoption of PMS significantly contributed to project success by improving coordination, enhancing transparency, and allowing real-time tracking of project progress. However, certain challenges, such as the steep learning curve associated with some software tools and resistance from team members due to lack of familiarity, were also noted. The study also revealed that PMS tools were particularly effective in mitigating risks, managing resources efficiently, and fostering better communication among stakeholders. In conclusion, this research provided valuable insights into how PMS could be optimized for ICT project management in Sri Lanka, offering recommendations for organizations looking to improve their project outcomes through effective software usage. It also emphasized the need for user training and change management strategies to overcome adoption barriers. The findings contributed to the growing understanding of the role of technology in improving project management processes and offered practical guidance for enhancing ICT project success in emerging markets like Sri Lanka.

Keywords: *Project Management Software, Information and Communication Technology Projects, Project Success*



Leveraging Agile Methodology on Mitigation of Management Failures in Sri Lankan Software Development Projects

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Abstract

The software development industry in Sri Lanka, a key driver of economic growth, faces significant challenges due to recurring management failures that lead to project delays, budget overruns, and compromised quality. Traditional project management approaches often fall short in addressing the dynamic and complex nature of software development. This study explores the potential of Agile methodologies to mitigate these management failures, offering a strategic framework for enhancing project success rates within the Sri Lankan context. Agile's emphasis on iterative development, continuous feedback, and cross-functional collaboration aligns well with the unique demands of the local software industry. Through a comprehensive analysis of real-world case studies, industry surveys, and theoretical insights, this research identifies common management pitfalls and assesses Agile's effectiveness in overcoming them. The study also investigates the challenges and limitations of Agile adoption in Sri Lanka, proposing practical solutions to these barriers. The findings contribute to the existing body of knowledge by providing empirical evidence on the role of Agile in transforming project management practices, ultimately offering actionable recommendations for industry stakeholders. By leveraging Agile methodologies, the study aims to drive the growth, resilience, and global competitiveness of Sri Lanka's software development sector.

Keywords: *Agile Methodology, Project Management, Sri Lankan Software Development, Management Failures, Iterative Development, Project Success.*



Unveiling the Influence of Artificial Intelligence on Project Governance in Sri Lankan Software Industries

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Abstract

In the rapidly evolving landscape of the Sri Lankan software industry, project governance stands at the crossroads of tradition and transformation. While conventional governance frameworks have long guided project execution, they often struggle to keep pace with the complexities and uncertainties of modern software development. Enter Artificial Intelligence (AI), a disruptive force poised to redefine project governance by enhancing decision-making, mitigating risks, and optimizing resource allocation. This research navigates on a journey to explore the application and influence of AI on project governance within the Sri Lankan software sector. Using a qualitative approach, this study gathers insights from project managers, IT professionals, and AI specialists, unravelling how AI is integrated into project governance and its tangible effects on project performance. By leveraging in-depth interviews and secondary data from industry reports, scholarly articles, and governance frameworks, the study examines the dual nature of AI both as an enabler of efficiency and a source of new governance challenges. The findings reveal that AI-driven tools ranging from predictive analytics to automated compliance tracking can revolutionize project governance by reducing uncertainty and enhancing real-time decision-making. However, the research also uncovers significant barriers, including data quality concerns, ethical dilemmas, and the need for human oversight in AI-driven governance models. Through a synthesis of theoretical perspectives and practical insights, this study offers a roadmap for Sri Lankan software firms aiming to harness AI for more agile, transparent, and effective project governance. By bridging the gap between AI potential and governance realities, this research contributes to the evolving discourse on AI-driven project management, offering strategic recommendations for organizations ready to embrace the future of governance.

Keywords: *Artificial Intelligence, AI Integration, Decision-Making, Project Governance, Sri Lankan Software Industry.*



Agile Project Management Approach in Tourism Hospitality Industry Projects in Puttalam District

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Abstract

This study explores the Agile project management approach in tourism and hospitality industry projects in Puttalam District. Recognizing the dynamic nature of tourism and the need for adaptability, this research investigates how Agile methodologies can address operational inefficiencies, enhance responsiveness to market changes, and support sustainability initiatives within hotel management. Employing a qualitative research method, data was gathered through in-depth interviews with a purposive sample of project managers, hotel owners, stakeholders, and industry experts from six selected hotels. Each hotel contributed insights from at least two employees, ensuring a minimum sample size of twelve respondents. The findings reveal that Agile project management practices are increasingly being adapted for specific hospitality projects, including marketing campaigns, event organization, and facility upgrades. A hybrid resource management approach is commonly employed, with in-house teams managing smaller tasks and external contractors handling large-scale projects. Agile methodologies such as Scrum and Kanban are preferred for flexible operations, whereas structured approaches like Waterfall are used for renovation projects. However, several challenges hinder the adoption of Agile in the hospitality sector, including the difficulty of balancing flexibility with fixed schedules, unclear role definitions, resource limitations, and the industry's inherently fast-paced nature. This study provides a detailed analysis of the applicability of Agile project management in enhancing efficiency, adaptability, and sustainability in hospitality projects and offers recommendations to facilitate the broader adoption of Agile practices in the region's tourism and hospitality industry.

Keywords: *Agile Project Management, Tourism Project Management, Hospitality Management, Sustainable Tourism and Puttalam District Tourism*



Examining Project Portfolio Management of NGOs in Sri Lanka

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Abstract

This study explores the Project Portfolio Management (PPM) practices and challenges faced by non-governmental organizations (NGOs) in Sri Lanka, using qualitative data from 10 semi-structured interviews with key personnel. The thematic analysis identified two main themes: PPM practices and challenges. The study found that NGOs in Sri Lanka engage in several PPM practices, including planning and strategy alignment, resource allocation, monitoring and evaluation, stakeholder engagement, risk management, and project documentation and reporting. However, several challenges impede the effectiveness of their project portfolios. These challenges include limited resources, a lack of skilled staff, ineffective communication, political and bureaucratic hurdles, stakeholder conflicts, and gaps in monitoring and evaluation. Specific issues identified include constant shortages of funds and resources, which affect project scale; communication breakdowns between teams and stakeholders; delays in project approvals due to government bureaucracy; conflicts arising from differing priorities among donors and local stakeholders; and the absence of robust follow-up mechanisms for tracking project impacts. The study recommends that NGOs in Sri Lanka invest in capacity building initiatives to enhance the skills of their staff in PPM, and establish formalized project management frameworks to better align projects with organizational goals. Furthermore, fostering greater collaboration between NGOs, the private sector, and international donors can help alleviate financial constraints. NGOs should also implement more robust monitoring and evaluation systems to track project performance and outcomes. Finally, strengthening internal and external communication channels will help reduce conflicts and improve coordination, ultimately enhancing project success and long-term sustainability. These findings highlight the critical need for better strategic alignment, resource management, and continuous monitoring to improve project outcomes in Sri Lankan NGOs.

Keywords: *Portfolio, Portfolio Management, NGOs, Project Portfolio Management Practices, Challenges, Recommendations.*



The Influence of Strategic Planning on the Effectiveness of Tourism Hotel Projects in Galle District

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Abstract

This qualitative study investigates the influence of strategic planning on the effectiveness of tourism hotel projects in Galle District. The research examines how financial planning, marketing planning, and human resource planning strategies impact key performance indicators: financial performance, customer satisfaction, and staff performance. Data were collected through in-depth interviews with seven 5-star hotel managers and board members directly involved in strategic planning processes. The findings reveal that financial planning ensures profitability and resource optimization, while marketing planning enhances customer satisfaction by aligning services with guest expectations. Human resource planning plays a pivotal role in improving staff performance, ultimately influencing the overall guest experience. Additionally, the study identifies challenges such as resource constraints, fluctuating demand, and competitive pressures that barrier to the effective implementation of strategic planning. By addressing these issues, this research offers actionable insights for improving strategic planning practices to enhance the effectiveness, competitiveness, and sustainability in the tourism sector. The study contributes to the body of knowledge by bridging the research gap in strategic planning practices within the Sri Lankan tourism context and provides valuable recommendations for hotel managers and policymakers to support long-term growth and resilience.

Keywords: *Tourism Industry, Strategic Planning, Effectiveness*



Track 02: Regional Planning & Development



A study on Monitoring and Evaluation Practices and their Effectiveness on Construction Firms in Sri Lanka

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Abstract

The construction industry in Sri Lanka significantly contributes to national economic growth but faces persistent challenges such as inefficiencies, delays, cost overruns, and quality issues. These problems are often linked to inadequate monitoring and evaluation (M&E) practices and their effectiveness. This study explores the effectiveness of current M&E practices in Sri Lankan construction firms, identifying key challenges and proposing improvements. Using a qualitative research approach, data was gathered through structured interviews with industry professionals, and thematic analysis was employed for insight extraction. The findings highlight that while M&E is essential, its implementation is hindered by resource constraints, insufficient technical expertise, and ineffective communication. The study also reveals that M&E practices vary across firm sizes, influencing project efficiency differently. Strengthening M&E through proper planning, adequate budgeting, skill enhancement, and technology adoption can improve project performance in terms of time, cost, and quality management. Key recommendations include investment in training, the use of digital monitoring tools, and fostering stakeholder collaboration to enhance transparency and accountability. This research contributes valuable insights for industry professionals, policymakers, and researchers to develop more effective M&E frameworks, ultimately improving construction project outcomes in Sri Lanka.

Keywords: *Construction Firms, Effectiveness, Monitoring and Evaluation Practices, Project Management, Sri Lanka.*



Strategic Management Practices and Project Outcomes in Development Projects in Western Province

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Abstract

This study investigated the role of strategic management practices in influencing the outcomes of development projects in the Western Province of Sri Lanka. It aimed to identify the key practices that contributed to project success and examined how these practices addressed the challenges faced in development projects, such as stakeholder conflicts, resource constraints, and risk management. The significance of this study lay in its contribution to understanding the importance of strategic management in development project success, particularly in complex and uncertain environments. The findings offered practical insights for project managers and policymakers on how to enhance project performance by implementing effective strategic management practices. A qualitative research design was employed, with data collected through semi-structured interviews with project managers, team members, and key stakeholders involved in major development projects. The analysis focused on key strategic management practices, including stakeholder engagement, resource allocation, and risk management. The study used thematic analysis to identify patterns and insights from the interviewees. The study found that effective stakeholder engagement, proactive risk management, and efficient resource allocation were crucial for achieving project success. Projects that adopted a strategic approach to managing these practices tended to complete on time, within budget, and with higher stakeholder satisfaction. Additionally, leadership support and organizational culture played a significant role in the successful implementation of these practices. This study provided practical recommendations for enhancing strategic management practices in development projects. It contributed to the broader understanding of strategic management in development contexts and suggested avenues for improving project outcomes in Sri Lanka's development sector.

Keywords: *Development Projects, Risk Management, Resource Allocation, Stakeholder Engagement, Strategic Manage*



The Role of Technology Adoption in Improving Project Management Efficiency in the Coconut Plantation Projects in Sri Lanka

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Abstract

The coconut plantation sector in Sri Lanka is a crucial component of the nation's agricultural economy, yet inefficiencies in project management hinder its full potential. This study investigates the role of technology adoption in enhancing project management efficiency within large-scale coconut plantation projects. The main objective is to analyse how technological integration uniquely influences efficiency, resource management, and decision-making in large-scale coconut plantation projects. It explores how Geographic Information Systems (GIS), precision agriculture, Internet of Things (IoT)-based tools, and data-driven decision-making processes contribute to improved resource allocation, productivity, and operational sustainability. Using a qualitative research approach, the study gathers insights from plantation managers, agricultural officers, and technology specialists to assess the current state of technological integration and identify key barriers to adoption. Findings indicate that while advanced technologies offer significant potential to optimize operations and improve efficiency, widespread adoption is hampered by challenges such as high implementation costs, inadequate technical expertise, and resistance to change among stakeholders. The research highlights the need for strategic interventions, including government policy support, financial incentives, and capacity-building programs, to bridge this gap. Furthermore, it underscores the importance of digital transformation in mitigating climate-related risks, reducing waste, and aligning Sri Lanka's coconut industry with global agricultural standards. By addressing a critical gap in literature and practice, this study provides actionable recommendations for policymakers, investors, and agricultural stakeholders to modernize coconut plantation project management. The findings contribute to a broader understanding of the intersection between technology adoption and agricultural efficiency, promoting sustainable development and long-term competitiveness in Sri Lanka's coconut sector.

Keywords: *Agricultural Sustainability, Coconut Plantation Projects, GIS Technology, Precision Agriculture, Project Management Efficiency, Technology Adoption*



Exploring the Managing Scope Changes and Requirement Volatility in Software Development Projects

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Abstract

The purpose of this study is to understand best practices and methods that can be used in countering challenges related to scope and requirements in software development with reference to the Agile and Waterfall project management approaches. The challenges that often come from scope changes include indicators such as change demands from stakeholders, regulatory and changes in business needs and requirement volatility demanding changes in project requirements, and they are usually counterproductive to factors such as project time, cost and stakeholder satisfaction. Based on interviews with 10 project stakeholders which the organizations using Agile, this study reveals that Agile is very flexible incorporating feedback in iterative procedures and tools like JIRA and Confluence. All these give higher satisfaction and lead to align the Agile with the ever-changing requirements, therefore makes it perfect for dynamic and competitive areas. On the other hand, Waterfall methodologies are more appropriate for compliance regulated project which have fixed requirements because Waterfall is much more predictable, more focused on budget and regulatory compliance. Insights focused on enhancing the identification and involvement of project stakeholders, the implementation of method approach measures specific to the type of project, and the use of sound advanced technological tools to monitor project work progress and change project processes as needed. Research enablers for the future include; integrated methodologies, AI systems for project management, and the use of change and requirement management across sectors to mitigate on the challenges brought about by volatility in the project scope.

Keywords: *Scope Changes, Requirement Volatility, Methodologies (Agile, Waterfall), Software Development and Project Success*



Impact Assessment of Iranamadu Irrigation Water Supply Project Scheme in Kilinochchi, Sri Lanka

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Abstract

The Iranamadu Irrigation Scheme was initiated to enhance agricultural productivity, economic growth, and water resource management in the Kilinochchi District, Sri Lanka. This study assesses the scheme's overall impact on agricultural sustainability, socio-economic well-being, and environmental conservation. Using a qualitative research approach, data was collected through semi-structured interviews with 13 key stakeholders, including farmers, project officers, and community leaders. Thematic analysis was employed to extract insights on infrastructure effectiveness, resource allocation, and community perceptions. Findings reveal that poor infrastructure quality, including the failure of the bund-raising project and inefficient water management practices, significantly affected irrigation reliability. Farmers relying on water-intensive crops such as paddy faced unpredictable water supply, leading to decreased agricultural output and financial instability. Social conflicts emerged due to competing water demands between the Kilinochchi and Jaffna communities, exacerbating regional inequalities. Additionally, environmental degradation, such as soil erosion and water contamination, was identified as a critical concern, highlighting the lack of climate resilience in project planning. The study underscores the necessity for improved governance, equitable resource distribution, and integration of climate-adaptive measures to ensure long-term sustainability. Strengthening stakeholder participation in decision-making and adopting advanced irrigation technologies can enhance project effectiveness. The findings provide valuable insights for policymakers, development agencies, and project planners involved in similar large-scale irrigation initiatives, ensuring that future projects achieve both developmental and environmental objectives.

Keywords: *Agricultural Productivity, Environmental Sustainability, Iranamadu Irrigation Scheme, Socio-Economic Impact, Water Management.*



Critical Success Factors of Local Government Projects in Kalutara District Sri Lanka

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Abstract

Local government projects are instrumental in regional development, yet their success is typically plagued by financial, administrative, and stakeholder problems. This study investigates the critical success factors (CSFs) influencing the performance of local government projects in Kalutara District, Sri Lanka. Given the significant contribution of these projects to public service delivery and infrastructure development, an insight into the determinants of their success is vital for improving governance and project management practice. Adopting a Qualitative method approach, the research identifies and investigates key CSFs such as stakeholder engagement, resource allocation, adequate planning, and communication. Primary data were collected through surveys and interviews with project stakeholders, such as government officials, project managers, and citizens. Secondary data were analyzed to supplement findings and provide contextual insight into the project environment of Kalutara District. The findings indicate that effective local government projects have definitive objectives, energetic stakeholder involvement, efficient distribution of resources, and sound leadership dedication. Red tape in bureaucracies, low funds, and ineffective risk management were regarded as major barriers to project success. Remedies like streamlined approval processes, greater community participation, and shrewd financial planning were proposed to eliminate these drawbacks. This study contributes to the literature by addressing a significant knowledge gap in localized research on CSFs in Sri Lankan local government projects. The research offers practical recommendations for policymakers and project managers to enhance project efficiency, sustainability, and overall project success. By implementing these initiatives, local governments can optimize project outcomes, leading to improved service delivery and long-term regional development.

Keywords: *Additional Success Factors, Challenges in Local Government Projects Critical Success Factors, Mitigation Strategies for Challenges*



Assessing Project Portfolio Management Strategies and their Impact on Project Success in NGOs: A Case Study of Nuwara Eliya Palm Foundation

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Abstract

This study investigates the impact of Project Portfolio Management (PPM) strategies on the success of projects in NGOs, with a specific focus on the Nuwara Eliya Palm Foundation in Sri Lanka. The research aims to explore the PPM practices employed by the foundation, assess the relationship between these strategies and project success, identify determinants of PPM practices, and examine the challenges faced during implementation. A qualitative approach was adopted, utilizing semi-structured interviews with stakeholders including project managers, coordinators, and community representatives. Thematic analysis revealed five key themes: PPM strategies and practices, stakeholder involvement, resource management, challenges in implementation, and impact on project success. The findings highlight that structured PPM strategies significantly influence project outcomes by ensuring alignment with strategic goals, optimizing resources, and enhancing accountability. However, challenges such as donor-driven changes, bureaucratic inefficiencies, and resource constraints hinder effective implementation. Determinants of PPM practices include donor requirements, funding cycles, regulatory frameworks, and internal capacity. Participants recommended adopting centralized approval systems, improving communication among stakeholders, enhancing resource forecasting, and utilizing advanced project management tools to address challenges. This study contributes to the limited literature on PPM in NGOs, offering practical insights for improving project outcomes. It underscores the need for systemic reforms and collaborative approaches to optimize project efficiency and sustainability. Future research should explore technology integration and comparative analyses of PPM practices across sectors to further advance the field.

Keywords: *Project Portfolio Management, NGOs, Project Success, Resource Management, Stakeholder Involvement.*



Investigation into the Key Competencies for Innovative Projects in FMCG Industries - Case Study

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Abstract

The FMCG sector is a fast-paced and competitive field propelled by swift advancements and changing consumer preferences. Effective management of innovation is vital for maintaining market relevance. This research identifies essential project management skills necessary for promoting innovation within Sri Lanka's FMCG sector, classified into technical, Contextual, and behavioural competencies. A qualitative methodology was employed, consisting of a thematic analysis of interviews with professionals, including project managers, innovation leaders, and senior executives. The findings reveal critical technical competencies such as expertise in product development (seven-gate framework), familiarity with project management tools, lean and agile methodologies, business and data analysis, AI-based decision-making, and the acquisition of external technologies. Furthermore, strategic thinking, stakeholder mapping, cross-functional collaboration, sub contracting, change management and effective resource allocation have surfaced as necessary as a Contextual. Behavioural competencies such as adaptability, curiosity, emotional resilience, networking, risk-taking, transparency, empathy, and an entrepreneurial mindset are also crucial. Additionally, skills in supplier control, quality management, product formulation, sampling, innovative packaging, and the integration of consumer feedback were recognized as essential for driving innovation. By incorporating these competencies throughout the project lifecycle, FMCG companies can boost innovation, thereby ensuring sustainable growth and competitive advantage in the market. This study offers valuable perspectives on nurturing an innovation- focused culture in the industry.

Keywords: FMCG, Project Management Competencies, Innovation, Technical Competencies, Contextual Competencies, Behavioral Competencies, Cross-functional Collaboration, AI, Agile Methodologies.



How do Project Communication Practices Support for the Effective Decision-making of Project Managers in Sri Lankan Construction Projects?

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Abstract

In construction project management, effective communication is essential, especially in dynamic and complicated settings like the Sri Lankan construction industry. This study investigates how successful decision-making among project managers in Sri Lankan construction projects is facilitated by project communication techniques. The Port City Project, Lotus Tower Project, Bingiriya Export Processing Zone, Wayamba University Township Project, and Mattala International Airport are among the major infrastructure projects that are examined in this study, which uses a qualitative research methodology. To have a thorough grasp of communication dynamics, data collecting involves conducting in-depth interviews with team members and project managers in addition to document analysis. Thematic analysis is used to evaluate communication-related issues, determine the most effective channels and methods for communication, and create plans to improve the effectiveness of decision-making. According to preliminary research, collaborative meetings, organized reporting systems, and digital communication tools greatly improve decision-making. However, the study also identifies important obstacles that prevent successful communication, such as linguistic limitations, cultural differences, and a lack of widespread acceptance of technology. The study suggests a strategy framework to improve decision-making results by enhancing communication techniques in order to solve these issues. The study's conclusions add to the corpus of knowledge already available on project communication in construction management and offer useful advice to stakeholders in the sector. The suggested framework seeks to enhance project efficiency, reduce risks, and facilitate the successful completion of major infrastructure projects in Sri Lanka by improving communication tactics.

Keywords: *Thematic Analysis, Construction Project Management, Decision-Making, Communication Challenges, Sri Lanka, and Project Communication Practices.*



Work-life Balance in Project-Based Organizations During the Ongoing Economic Crises of the Country

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Abstract

The ongoing economic crisis in Sri Lanka has significantly affected work-life balance (WLB) in project-based organizations. This study explores how economic downturns influence employees' ability to balance personal and professional commitments. A qualitative research approach was employed, utilizing in-depth interviews and secondary data sources to examine the key factors impacting WLB. Findings reveal that increased workloads, job insecurity, and financial instability have led to heightened stress levels among employees. Limited resources, prolonged working hours, and inadequate organizational support have exacerbated challenges in maintaining WLB. Applying Resource Conservation Theory (RCT), the study demonstrates how the depletion of essential resources—such as time, energy, and emotional resilience—has intensified WLB difficulties. However, organizations that implement flexible work arrangements, mental health support programs, and financial assistance initiatives have observed improved employee well-being and productivity. The study underscores the necessity for targeted interventions to mitigate the adverse effects of economic crises on WLB in project-based organizations. Practical recommendations include adopting flexible work policies, strengthening mental health initiatives, and providing financial support mechanisms to enhance organizational resilience. This research contributes to the academic discourse on WLB during economic downturns and provides valuable insights for project managers and policymakers seeking to foster employee well-being and sustainability in challenging economic environments.

Keywords: *Economic Crisis, Work-life Balance, Project-Based Organizations, Resource Conservation Theory, Sri Lanka*



Sustainability Assessment of Agriculture Projects Implemented by Ministry of Agriculture and Plantation Industries in Sri Lanka

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Abstract

Agriculture is the important backbone of the Sri Lankan economy, with about 82% of the population deriving their livelihood from it. Realizing this, the Ministry of Agriculture and Plantation Industries has implemented several projects during recent years to enhance productivity, sustainability, and climate resilience in agriculture. However, several questions still exist over the longer-term sustainability of these interventions. Based on the perspectives discussed, this study assesses the sustainability of chosen agricultural projects based on a multidimensional framework that covers the three dimensions: environmental, economic, and social. These include the key initiatives such as the Climate Smart Irrigated Agriculture Project, the Smallholder Agribusiness Partnerships Program, and the Agriculture Sector Modernization Project. The study used a qualitative approach, in which semi-structured interviews among 40 stakeholders-comprising farmers, project managers, agricultural officers, and policy makers-were conducted along with secondary data obtained from project reports and project evaluations. Key findings reveal remarkable successes, including increased water-use efficiency, better market access for smallholders, and increased crop yields due to mechanization supported by high-yielding varieties. However, despite these challenges, access to advanced technology is still limited, training remains insufficient, installation costs are high, and payments along supply chains take too long. In addition, environmental considerations would include the sustainability of irrigation systems and soil fertility. This study gives recommendations that can be taken to fill the existing knowledge gap in sustainability analyses of agricultural projects. These include developing community-based maintenance systems, increasing financial incentives related to subsidy and soft loans, and widening stakeholder training. These will help ensure long-term sustainability of such agricultural projects for Sri Lanka's food security, rural livelihoods, and climate resilience. This integration of environmental, economic, and social perspectives shall therefore provide an overall evaluation framework and priceless policy implications to support sustainable agricultural development in Sri Lanka.

Keywords: *Agricultural Sustainability, Sustainability Assessment, Environmental Sustainability, Economic Sustainability, Social Sustainability*



Track 03: Risk & Disaster Management



Project Schedule Management Practices at National Water Supply and Drainage Board: A case Study in Ratnapura District

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Abstract

This research investigates the project schedule management (PSM) practices at the National Water Supply and Drainage Board (NWSDB) in the Ratnapura District, Sri Lanka. The study aims to explore the effectiveness of the scheduling practices used by NWSDB, identifying the practices, strengths, weaknesses, and challenges in current schedule management. A qualitative approach was employed, with data gathered through interviews with ten key stakeholders, including project managers, engineers, and engineer assistants, across five ongoing projects in the Ratnapura district. The findings reveal that NWSDB employs a variety of tools and techniques use to manage project schedules, including Gantt charts, the progress display board, the Critical Path Method (CPM), Marking Pipe Laying Progress in a Drawing, Meeting and advanced scheduling software like MS Project and Primavera P6. These tools and techniques provide clear visualization of project schedules, allowing for effective tracking of progress and aiding in real-time adjustments. They also enhance decision-making, ensure optimal resource allocation, and help minimize delays, thus maintaining project timelines. Additionally, the use of Daily Progress Reports (DPR), the NWSDB website, the Bill of Quantities (BOQ), and project charters serve as reliable inputs for defining activities, estimating durations, and allocating resources, contributing to improved planning and coordination. The research identifies weaknesses in NWSDB's schedule management practices including difficulties and complexity, manual data entry errors, and limited staff proficiency with scheduling tools. Additionally, this research identifies challenges in NWSDB's project schedule management. Mainly including like weather and soil condition, land acquisition, coordination issues of NWSDB Master Plan with RDA Master Plan and less knowledge can be identified by this research as challenges. The study recommends using regional Gantt charts, providing staff training, concern environmental factors, and improving communication via digital tools and software like WhatsApp and suggests better coordination with RDA and NWSDB master plan.

Keyword: NWSDB's projects in Ratnapura District, Schedule Management Practices, Strength and Weakness of Schedule Management Practices, Challenges of Schedule Management, Recommendation



The Impact of Scope Creep on Project Success of Software Project in Sri Lanka

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Abstract

Scope creep, defined as the uncontrolled expansion of product or project scope without corresponding adjustments to time, cost, and resources, poses a significant challenge in software development projects. It is a leading cause of project failure, contributing to the downfall of nearly 80% of unsuccessful software projects. This quantitative study investigates the critical impact of scope creep on the success of software development projects in Sri Lanka. The primary objective is to identify and quantify the key factors that contribute to scope creep and evaluate their influence on project outcomes, including time, cost, quality, and stakeholder satisfaction. A comprehensive dataset was collected from various software development projects across multiple industries in Sri Lanka. The data encompassed variables such as project scope, timelines, team size, budget allocation, user involvement, and documented instances of scope creep, including changes in requirements, feature additions, and uncontrolled expansions. The study also addresses significant research gaps by examining how effective scope management practices influence project success. The findings offer valuable insights for stakeholders, including developers, engineers, project managers, and team members, providing practical recommendations for improving scope management frameworks. By identifying best practices for controlling scope creep, this research aims to help organizations enhance their project success rates in Sri Lanka's dynamic and evolving software development landscape. Ultimately, this study contributes to the field of software project management by offering a deeper understanding of scope creep and its implications, supporting more effective and sustainable project management practices.

Keywords: *Scope creep, Scope management, Scope change, Software project, Project success.*



Exploring the Disaster Management Practices: on Reduction of Landslide Vulnerability by Mitigation Measures Project in Rathnapura District

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Abstract

Landslides provide a serious disaster risk in Sri Lanka, especially in the Rathnapura district, where harsh weather and deforestation enhance vulnerability. This research focusses on the Reduction of Landslide Vulnerability by Mitigation Measures Project (RLVMMP), which evaluates disaster management strategies. The recognised issue is the inefficiency of mitigating methods, despite continual attempts, resulting in continued landslide-related losses. The study aims to answer crucial questions on the preparedness, prevention, mitigation, response, and recovery measures used in RLVMMP. The goals include evaluating the effectiveness of current disaster management strategies, finding gaps, and making recommendations to improve landslip resilience. The study identifies a large knowledge vacuum about how community participation, technological integration, and policy enforcement affect catastrophe risk reduction. Methodologically, the research takes a qualitative approach, with interviews with project officers, community members, and disaster management professionals. Convenience sampling was utilised to choose 23 participants, from the total population (30) which included 15 disaster-affected households, 5 project officers, and 10 community members. Data was gathered through interviews and secondary sources such as government publications and policy documents, then analysed using Microsoft Word and Excel, with the results displayed as pie charts and bar graphs. The findings show that, while RLVMMP incorporates hazard mapping, early warning systems, and structural mitigation measures, gaps exist in stakeholder coordination, financial sustainability, and community engagement. The recommendations include boosting investment in sustainable infrastructure, improving public-private partnerships, and strengthening community-led disaster preparedness. This work helps to disaster risk management by offering insights that may help Sri Lankan policymakers enhance landslide mitigation techniques.

Keywords: *Disaster, Disaster management, Disaster management practices Disaster management practices in project*



The Role of Non-Governmental Organizations in the Disaster Management Process. A Case Study on Floods and Landslides in Sri Lanka

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Abstract

This thesis examines the significant role played by Non-Governmental Organizations (NGOs) in disaster management process such as mitigation, preparedness, response, and recovery with a focus on floods and landslides in Sri Lanka. Addressing these gaps is essential for improving disaster management practices in Sri Lanka. This research seeks to fill this void by exploring the role of NGOs in the disaster management process, specifically during floods and landslides, and identifying the factors that influence their success and limitations as a country highly vulnerable to various natural hazards, including monsoonal flooding, landslides, and the potential risk of Sri Lanka offers an insightful case for understanding the impact of NGOs in disaster risk management. The study assesses how NGOs contribute to reducing the impacts of these disasters, particularly in terms of immediate relief, long-term recovery, and community-based risk reduction efforts. Which does NGO such as OFERR, RAHAMA, SLRCS, FIRM, and World Vision for the research purpose by analyzing case studies such as the 2016 floods, the 2017 landslides, and preparedness initiatives, this research highlights the strategies, challenges, and successes of NGO interventions. Target population is the sum of elements about which inferences are to be made Sri Lanka at present there are five non-government organizations are functioning to provide quality especially for the displaced, poor and the oppressed people. The findings also suggest ways to strengthen the capacity of NGOs and improve coordination with government agencies, local communities, and international bodies in disaster-prone regions. NGOs play a significant and indispensable role in disaster management in Sri Lanka, particularly in the context of floods and landslides. However, addressing the challenges they face and strengthening partnerships with the government and local communities will further enhance their effectiveness and impact. By focusing on coordination, capacity-building, and sustainability, NGOs can contribute even more effectively to disaster management processes in the future.

Keywords: *Challenges NGOs face in disaster management, Disaster management process, Disaster management, Effectiveness of NGO-government and NGO-community partnerships in disaster management, NGO practices*



Exploring Meal Application of Disaster Management Projects in DMC Badulla District

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Abstract

This study explores the application of the Monitoring, Evaluation, Accountability and Learning (MEAL) framework in disaster management projects implemented by the Disaster Management Centre (DMC) in Sri Lanka's Badulla district which is a region highly vulnerable to natural disasters such as floods and landslides. The research investigates how MEAL components impact the effectiveness, transparency and adaptability of disaster management practices. Using a qualitative case study approach, data were collected through semi-structured interviews with key stakeholders including project coordinators, field officers and community leaders. The findings reveal that the MEAL framework significantly enhances disaster response by enabling real-time data collection, resource allocation, stakeholder engagement and adaptive learning. However, challenges such as limited resources, logistical constraints, inconsistent accountability standards and resistance to new practices hinder its full implementation. The study showcases the need for targeted interventions, including investments in advanced technologies, standardized processes, and staff training and developing a culture of learning. Recommendations include strengthening monitoring systems, enhancing evaluation methods, promoting transparency and encouraging collaboration among stakeholders to ensure cohesive disaster management. The study's implications extend to practice, policy and future research, with a focus on scaling the MEAL framework to other disaster-prone regions and integrating emerging technologies for improved efficiency. This research contributes to the growing body of knowledge on adaptive and sustainable disaster management practices.

Keywords: *MEAL framework Disaster Management, Monitoring, Evaluation, Accountability, Learning, Badulla district, Disaster resilience and DMC*



A Study on Risk Management Practices on Information Technology Projects in Western Province Sri Lanka

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Abstract

This study examines the influence of Risk Management Practices on IT project success in the context of Western Province, Sri Lanka, covering project planning, identification of risk, risk assessment, and monitoring and evaluation. The literature review on studies related to the use of risk management strategies within the Sri Lankan IT sector is limited, and this study tries to fill the gaps in the previous studies. Related literature review covers past studies on the impact that Risk Management Practices has on project success in various industries, and it has also been established that good risk management can always improve project outcomes to meet the satisfaction of the clients and maintain budgets. In this study, a survey approach was used to retrieve data from 100 IT professionals through questionnaires, thus enabling comprehensive SPSS analysis. This study uses the methods of correlation and regression analysis in order to study relationships or influences that might exist between Risk Management Practices and IT project success and finds significant positive correlations. Certain influential practices were those related to risk identification, planning, and monitoring, while assessment of risk had a mixed relationship that would require further investigation. Key recommendations from these findings include enhancing risk management practices through organized project planning and cross-functional stakeholder involvement in the risk identification process, supported by continuous monitoring activities with data analytics. These will contribute toward enhancing the understanding of proactive risk management in the Sri Lankan IT industry, while providing practical insights relevant to practitioners and academics interested in value optimization of project success. The conclusion of this research has been a call for an extended study on long term RMP effects on IT projects, especially in emerging markets.

Keywords: *Risk Management Practices, IT Project Success, Sri Lanka*



Risk Identification Tools and Techniques of Construction Projects in Western Province

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Abstract

This study investigates the risk identification tools and techniques used in construction projects in Sri Lanka's Western Province, with a focus on their effectiveness and challenges. Given the rapid growth of the construction industry in the region, effective risk management has become crucial for the successful completion of projects. The primary objective of this research is to assess the strengths and weaknesses of current risk identification methods and propose improvements for enhancing risk management practices. A qualitative analysis approach was employed, utilizing data collected from surveys and interviews with construction experts, including project managers, engineers, and contractors. The study examines traditional risk identification tools, such as checklists, expert judgment, and brainstorming sessions, and evaluates their effectiveness in identifying and mitigating potential risks. Additionally, the research highlights challenges such as a lack of awareness, insufficient stakeholder involvement, and limited integration of advanced technologies like Building Information Modeling (BIM). The findings reveal that while current methods provide a basic framework for risk management, there are significant gaps in their application, particularly when addressing complex and unforeseen risks. To improve risk identification practices, the research recommends integrating advanced tools, adopting standardized risk management procedures, and fostering greater collaboration among stakeholders. Furthermore, capacity-building training programs for construction professionals are essential to improving the overall effectiveness of risk management. The study contributes to the development of more robust risk management strategies, aiming to enhance the success rate of construction projects in the Western Province by addressing the challenges and gaps in existing practices.

Keywords: *Construction Projects, Risk Identification, Risk Management, tools and techniques, Western Province.*



Exploring the Disaster Management Strategies Special References to Disaster Management Center of Sri Lanka

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Abstract

This study reviews the general and specific disaster management strategies of Sri Lanka, focusing on the Disaster Management Centre (DMC). The DMC was established by the Sri Lanka Disaster Management Act No. 13 of 2005 as the main agency for Disaster Risk Reduction (DRR) and response coordination. This study examines how these strategies have been implemented and assesses their effectiveness at different geographic and socio-economic levels, with the aim of narrowing the gap between national policies and district-level implementation. The literature review contextualizes disaster management within the frameworks of the disaster management cycle and the Sendai Framework for Disaster Risk Reduction, focusing on preparedness, response, and recovery. The research employs a qualitative methodology, including semi-structured interviews with disaster management officials, supplemented by document analysis. Data from five districts were analyzed thematically, reflecting varying disaster profiles: flood, drought, and landslide. Four themes emerged regarding preparedness strategies, response mechanisms, and recovery practices, as well as challenges in implementation. The study highlights regional differences in resources, community involvement, and infrastructure preparedness, which have implications for the effectiveness of disaster management strategies. The findings suggest that, while the DMC has made significant progress in hazard mapping and early warning dissemination, regional disparities in resource availability and fluctuating community participation remain significant challenges. The study concludes that pathways to increased disaster resilience in Sri Lanka include mainstreaming DRR in broader development planning, equitable resource distribution, and enhanced local capacities through targeted training and community involvement. The study also recommends site-specific approaches, improved inter-agency coordination, and the promotion of public-private partnerships to address existing gaps.

Keywords: *Disaster Management, Disaster Management Strategies, Preparedness Strategies*



The Study on The Impacts of Tourism Development Projects on Marine Resources at The Batticaloa District

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Abstract

Tourism development projects have significantly influenced marine resources in the Batticaloa District, a coastal region of Sri Lanka known for its biodiversity and pristine marine ecosystems. While tourism contributes to economic growth, employment generation, and regional development, its rapid and often unregulated expansion has posed serious threats to marine environments, including coral reef degradation, water pollution, and biodiversity loss. This research examines the specific impacts of tourism development projects on marine resources, investigates the contributing factors to environmental degradation, and explores sustainable solutions to mitigate adverse effects. The study employs a qualitative research approach, gathering data through interviews with local stakeholders, government officials, and community members. It identifies key challenges such as improper waste management, illegal fishing activities, and unsustainable infrastructure development along the coastline. The findings underscore the need for stricter enforcement of environmental regulations, community engagement in conservation efforts, and the adoption of eco-friendly tourism practices. This research highlights the dual role of tourism as both a driver of economic development and a contributor to environmental challenges. It emphasizes the importance of balancing tourism growth with marine resource conservation to ensure long-term sustainability in the Batticaloa District. Recommendations include implementing a comprehensive coastal tourism management plan, strengthening environmental policies, and promoting community-based tourism initiatives. These strategies aim to protect Batticaloa's unique marine ecosystems while fostering sustainable economic benefits for the region.

Keywords: *Tourism development projects, Marine resource, Coastal Environmental Impact, Batticaloa district*



A Study on Common Causes of Failures on Mega Projects of Sri Lankan Government

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Abstract

This research examines the shared reasons for failure of five large Sri Lankan government Megaprojects: Mattala Rajapaksa International Airport, Hambantota Port, Colombo Port City, Colombo Lotus Tower, and the Uma Oya Multipurpose Development Project. The projects, initiated to expand the nation's economic growth and infrastructure development, have been experiencing serious problems, such as financial mismanagement, poor governance, cost overrun, and poor feasibility studies. With a qualitative case study methodology, the research employs stakeholder interviews and document analysis to analyze the underlying causes of such failures. The literature review is informed by a synthesis of both international and local literature on megaproject failure and identifies political interference, inadequate project planning, inadequate risk management, and institutional weakness as the most significant factors. The report uncovers that systemic inefficiencies, unclear procurement, and poor financial controls are the factors that lead to the failure of such projects. As a response, the report suggests enhancing financial governance, making feasibility studies more rigorous, having independent monitoring of projects, and incorporating principles of sustainable development. Reforms in institutions are also needed to reduce political and financial risks, enabling improved project implementation. By tackling such concerns, the research offers essential information for policymakers, project managers, and stakeholders alike, and presents strategic options with a view to increasing the success of upcoming infrastructure mega projects in Sri Lanka.

Keywords: *Financial mismanagement, stakeholder involvement, governance, project Management, Sri Lankan megaprojects, infrastructure failures.*



Knowledge Management Practices in NGOs In Nuwara Eliya District

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Abstract

This study looks into the knowledge management practices of non-governmental organizations in Sri Lanka's Nuwara Eliya District, with the goal of understanding how they affect organizational performance and development project success. The study identifies and examines important knowledge management activities, such as knowledge production, storage, sharing, and application, at five NGOs World Vision Sri Lanka, Save the Children, Red Cross Society Sri Lanka, Tea Leaf Trust, and PALM Foundation. The research technique qualitative methodologies, with data collected from 20 employees across various firms. The study studies how information is managed within these NGOs and investigates the relationship between KM practices and organizational results, concentrating on operational effectiveness, innovation, and project success. Preliminary findings indicate that effective knowledge sharing, explicit knowledge storage procedures, and cultivating a culture of knowledge creation all significantly improve organizational performance. Organizations that use structured KM systems have higher success rates in project implementation and problem solutions. However, difficulties such as insufficient resources, organizational silos, and a lack of strategic alignment with KM objectives prevent KM processes from reaching their full potential. This study advances understanding of how NGOs might use KM to improve their performance and achieve long-term results in development activities. The report also makes recommendations for enhancing knowledge management techniques, such as using new technologies, conducting frequent training programs, and focusing on information retention strategies, all of which can lead to better service delivery and project outcomes. The findings will be useful for NGOs, policymakers, and practitioners seeking to improve knowledge management in order to improve organizational effectiveness and meet long-term development objectives.

Keywords: *Knowledge, Knowledge management, Knowledge management practices, non-government organization*



Track 04: Project Leadership & Sustainability Project Management



Examining the Impact of Critical Success Factors on Project Success of Community-Based Water Project: Vavuniya Distribution Extension Project

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Abstract

This study investigates the critical success factors (CSFs) that contribute to the success of community-based water projects (CBWPs), with a particular focus on the Vavuniya Distribution Extension Project (VDEP) in Sri Lanka. Data were collected from 100 participants through structured questionnaires with key stakeholders. Five key CSFs were identified: technological, community involvement, training and capacity building, leadership attributes and effective communication. Reliability analysis using Cronbach's Alpha confirmed the internal consistency of these factors, with values exceeding 0.7. The significance of these factors was validated through statistical measures, including the Kaiser Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity. The findings revealed that technological innovations facilitated efficient project execution, while high community involvement fostered ownership and satisfaction. Training and capacity building contributed positively to project outcomes, ensuring improved efficiency and skill development. However, leadership attributes exhibited a negative influence, suggesting potential challenges in leadership effectiveness. Transparent communication among stakeholders was pivotal in aligning project goals and resolving issues promptly. Significant challenges such as financial constraints, logistical issues, and community resistance were identified. Adaptive planning and strategic resource management were crucial strategies to mitigate these challenges. Despite a slight delay in project completion, the VDEP achieved its intended outcomes, demonstrating the critical role of the identified CSFs. The study concludes with practical recommendations for enhancing project management, community engagement, and adaptive strategies to address unforeseen challenges. Future research suggestions include exploring additional CSFs, conducting longitudinal studies, and employing mixed-methods approaches to gain deeper insights into project dynamics.

Keywords: *Community-based water projects, Critical success factors, Vavuniya Distribution Extension Project, Community involvement, Project management*



Influence of Stakeholder Communication on Project Success within Construction Firms in the Western Province

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Abstract

Construction project success directly depends on efficient stakeholder communication within the fast-growing context of Sri Lanka's Western Province. The research examines how stakeholder communication affects project success in construction firms by studying its essential planning management and monitoring aspects. The study examines different communication aspects that affect project success by evaluating time performance as well as cost and quality delivery and stakeholder contentment levels. The research adopted quantitative methods to collect data from 200 stakeholders in construction firms by using structured questionnaires which were analyzed statistically through SPSS software. The research data shows strong connections exist between project communication processes and their outcomes thus demonstrating why unique communication approaches help prevent project risks while fixing conflicts and boosting teamwork. Through proactive planning, organizations achieve clear expectations definition whereas effective communication management brings stakeholders together and improves transparency between them. Regular monitoring helps teams detect communication problems and makes possible their resolution which leads to better project efficiency. The study reveals that Western Province faces unique obstacles because of limited resources and numerous stakeholders' demands that demand customized solutions. This research bridges existing knowledge deficiencies about regional construction project management by providing useful recommendations and strategic communication approaches to improve stakeholder involvement. The research findings benefit project performance optimization efforts of practitioners and economic development through strengthened construction industry contributions. Future investigations should build upon this study through time-based assessments while extending its analysis to different geographic areas and business sectors.

Keywords: *construction industry, project success, stakeholder communication, Sri Lanka, Western Province*



Influence of Small-Scale Entrepreneurs on Regional Development in Puttalam District, Sri Lanka

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Abstract

This study explores how small-scale entrepreneurship how small-scale entrepreneurs contribute to regional development in the Puttalam District, focusing on economic growth, infrastructure development, and social cohesion, while identifying key challenges and opportunities. It explores how organized, planning and strategic decision-making key principles in Project Management (PM) impact the effectiveness of small-scale entrepreneurial activities in regional development. Using a qualitative approach, data were gathered through interviews with small-scale entrepreneurs, residents, and development officers in key areas like Chilaw, Puttalam town, and Kalpitiya. Findings indicate that small-scale entrepreneurs drive economic development by generating employment, fostering innovation, and strengthening business networks. They also enhance social cohesion by preserving cultural practices, supporting community engagement, and improving local livelihoods. Infrastructure development in the district is influenced by entrepreneurial activities, particularly in market expansion and service accessibility. However, these entrepreneurs encounter obstacles such as including limited financial access, policy constraints, inadequate infrastructure, and a lack of structured business planning and strategic management factors commonly addressed in Project Management frameworks. The research highlights the need for structured support mechanisms, stakeholder engagement, and resource optimization to enhance the resilience and contributions of small-scale entrepreneurs. This study addresses a gap in understanding the relationship between small-scale entrepreneurship and regional development in Sri Lanka. It provides practical insights for policymakers and stakeholders to promote inclusive growth and revitalization in rural areas. By tackling the identified challenges, the potential of small-scale enterprises can be maximized, leading to better outcomes in poverty alleviation and overall regional development in Puttalam.

Keywords: *Small-scale Entrepreneurship, Regional Development, Economic Growth, Infrastructure, Social Cohesion, Policy Intervention.*



A study on The Influence of Cloud Computing in Stakeholder Management and Project Performance: Special Reference in the Construction Industry

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Abstract

This research investigates the influence of cloud computing in stakeholder management and project performance within the construction industry. The study aims to assess how cloud computing enhances communication, collaboration, and study intends to evaluate how cloud computing improves stakeholder communication, collaboration, and decision-making among stakeholders while improving project performance in terms of time, cost, quality. The study delves into the obstacles and difficulties associated with implementing cloud-based technology in the field of building project management. It emphasizes the necessity for empirical research on cloud computing's effects on the construction sector as well as its growing significance in contemporary project management. Specifically, the lack of empirical studies on cloud computing's direct influence on construction project performance, particularly in the Sri Lankan context. The study adopts a quantitative research approach, using surveys to collect data from construction industry professionals. A structured questionnaire is designed to measure cloud computing adoption, stakeholder management efficiency, and project performance indicators. The study surveyed 100 sample in the construction sector was drawn using convenience sampling. Primary data were collected using self-administrated questionnaire. Questionnaire consisted 29 questions from one independent variable and two dependent variables. Data were collected through questionnaire filled by respondents. Data were analyzed by using SPSS software. Descriptive statistics and correlation were used as tool to analysis the data to achieve the objective of the study. The results show that cloud computing greatly enhances stakeholder collaboration, communication, and project effectiveness. The connections between the use of cloud computing and important project success measures and gives statistical findings. The study comes to the conclusion that cloud computing improves project performance and stakeholder management. Strategies for removing obstacles to adoption and optimizing the advantages of cloud-based solutions in the construction sector are among the recommendations. It is recommended that future studies investigate cloud computing applications in building project management in greater detail.

Keywords: *Cloud computing, Construction industry, Project performance, Stakeholder management*



The Alignment of Strategic Management and Project Portfolio Management in a NGO: A Case Study of Palm Foundation, SriLanka

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Abstract

Project portfolio management (PPM) and strategic management must be in harmony for an organization to succeed, especially for non-governmental organizations (NGOs) like Sri Lanka's PALM Foundation. With a focus on the procedures, difficulties, and tactics required to achieve alignment, this study explores the relationship between PPM and strategic management inside the PALM Foundation. The study investigates how structured frameworks such as KPIs, logical frameworks, and balanced scorecards might be integrated with participatory planning techniques using a qualitative case study methodology. The results show that by maximizing resource allocation and cultivating a distinct strategic focus, alignment improves project success. However, the process is hampered by important issues such as shifting stakeholder objectives, a lack of resources, and communication breakdowns. The report outlines effective strategies that the PALM Foundation has used to guarantee alignment with its long-term sustainable development goals, including integrated planning sessions, stakeholder cooperation, and dynamic project reviews. To further improve alignment, it is advised to create alignment task teams, use cutting-edge project management tools, and embrace best practices like strategy mapping. In addition to providing useful insights for NGOs looking to increase operational effectiveness and social impact, this research adds to the conversation on strategic alignment in resource-constrained situations. To expand on these findings, future research might examine digital tools and comparative methodologies in various organizational situations.

Keywords: *(Strategic Alignment, Project Portfolio Management (PPM), Non-Governmental Organization (NGO), Resource Optimization, Alignment Strategies)*



Impact of NGO-Led Child Rights Projects in Nuwara-Eliya District

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Abstract

This study looks how NGO-led child rights projects promote and protect children's rights in Nuwara-Eliya District. It examines both social and economic factors, with a focus on contributions from World Vision Sri Lanka, Save the Children, UNICEF Sri Lanka, T-Field Child Development Federation, and the PALM Foundation. Data were collected qualitatively from 20 NGO staff and 10 beneficiaries, including children, parents, and community members.

The findings show that there are significant social impacts, such as protection against abuse, reduced child marriage, support for marginalised children, increased social inclusion, and reduced social inequalities. These impacts are divided into two categories: education and health and well-being. Progress in early childhood education, reduced disparities, increased enrolment, and less child labour are all educational impacts. Reduced malnutrition, increased vaccination coverage, lower childhood illness rates, improved mental health, and lower child mortality are all from health and well-being outcomes. Economically, NGO projects have resulted in higher household incomes, increased agricultural productivity, poverty reduction, a more skilled workforce, and greater financial stability for future generations. These contributions help plantation communities overcome financial challenges and build sustainable livelihoods. The study emphasises the importance of NGO child rights projects in sustaining progress, closing resource gaps, and strengthening community participation. The findings can help policymakers, NGOs, and stakeholders develop more inclusive interventions for marginalised groups. It also serves as the foundation for future research and recommendations for successful child rights projects in Sri Lanka.

Keywords: *Child Rights, Non-Government Organization, Child Rights Projects, impact of child rights projects*



Performance Management Practices in Managing Human Resources In Project-Based Organizations: A Study of NGOs in Batticaloa District

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Abstract

The PBOs increasingly face sustainability and responsibility as pressing challenges in today's society. These organizations need flexible, smart, and technically advanced performance management practices that form the foundation of conversations, changes and progress. Furthermore, stakeholders in productivity and efficiency are now valuing innovation, creativity, and problem-solving. To live up to these expectations, organizations need to continuously improvise their performance management strategies. Organizational performance is the sum total of, employees' individual performance. The success of PBOs is based on employees doing their best to achieve project objectives. Human resources are the powerful value for every organization. Organizations cannot function without human resource support because, they are the responsible for handling non-human resources in order to achieve the organizational goals. Therefore, the organizations are adopting the performance management practices to improve their project performance and sustainability of the organization in an effective and efficient manner. It helps to them completing their project activities within triple constraints. The aim of this study is to assess the PfM practices in selected three PBOs with ten sample interviewees, particularly in the context of the NGOs in Batticaloa, Sri Lanka. And identify the practices effect on the project success and organizational sustainability. These practices involve setting clear goal (SMART), providing feedback, review and rewarding system, managing poor performance and maintaining high-performance using various tools and techniques, that are align with the organizational goals and mission. The implementation of the PfM practices face several challenges including, resource allocation, communication barrier, lack of technology, donors requirements and socio-culture of the organization. Many organizations emphasize staff capacity building, competency employment and professional growth to address these challenges. Despite these efforts, the effectiveness of PfM practices can be undermined by limited funding and fluctuating project timelines. As such successful performance management in PBO's requires a balanced approach that aligns project HRM practices with local needs and the broader objectives of humanitarian and developmental project work towards the sustainability of the organizations.

Keywords: *Human resource management, Performance management practices (PfMP), Project-Based Organizations (PBOs), Project Success*



Exploring The Integration of Gender Diversity and Inclusive Consideration in Public Sector Projects in Ratnapura District

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Abstract

Gender diversity and inclusion (GDI) are crucial to achieving fair and sustainable development. This study investigates the incorporation of GDI concerns into public sector projects in the Ratnapura District, evaluating their inclusion at each project phase initiation, planning, execution, and closure. A qualitative research approach was used, with data gathered from in-depth interviews with 15 project team members, including officers and stakeholders. The findings highlight the extent to which GDI principles are incorporated in public projects and reveal major problems, such as institutional biases, low knowledge, and marginalised groups' under-representation in decision-making. The study emphasises the significance of intersectionality in GDI, acknowledging the interaction of gender with other social identity elements. It also investigates approaches to improving gender-sensitive project design and implementation. The research emphasises the importance of capacity-building programs, policy reforms, and stakeholder engagement in promoting inclusive public sector development. Practical implications include suggestions for enhancing gender-responsive policies and institutional structures to foster a more equitable environment in public sector projects. The study adds to the broader discussion of sustainable development and public governance by providing practical insights into promoting gender inclusion in local government projects.

Keywords: Diversity, Gender, Inclusive consideration, Public-Sector, public-sector projects



Sustainable Project Management Practices in Women Empowerment Projects in Puttalam District

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Abstract

This study explored the Sustainable Project Management Practices in Women's Empowerment Initiatives in Puttalam District, Sri Lanka. Women's empowerment projects play a crucial role in advancing gender equality and improving socio-economic conditions in Sri Lanka. However, ensuring their long-term success and sustainability remains a challenge, particularly in rural areas like Puttalam District, where women face significant socio-cultural and economic barriers. Despite the potential benefits, many women's empowerment initiatives in Puttalam struggle with sustainability. Limited resources, societal norms, and ineffective management practices often impede their long-term impact. This study explores sustainable project management practices in women's empowerment initiatives in Puttalam District, aiming to identify practices that ensure long-term success and address the challenges faced by these projects. A qualitative research design was employed, involving 20 semi-structured interviews with NGOs and women in empowerment programs. Thematic analysis was used to identify key themes related to sustainable practices, impacts, and challenges. The study identified key sustainable practices such as community engagement, financial literacy training, transparent communication, and capacity building. Environmental sustainability practices, including eco-friendly agricultural techniques, were also highlighted as contributing to long-term success. Challenges included limited funding, cultural barriers, lack of capacity building, and poor communication. The study recommends enhancing community engagement, providing relevant training programs, increasing funding, and improving communication channels to improve sustainability. These measures can strengthen the effectiveness and longevity of women's empowerment initiatives.

Keywords: *Community Engagement, Qualitative Study, Sustainable Project Management, Women's Empowerment, Sustainability.*



The Impact of Quality Management Practices on The Performance of Construction Projects in Sri Lanka

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Abstract

Sri Lanka is a developing country. Here, the quality of the construction industry in Sri Lanka is weak. This can help to determine how it going impact projects positively through identify the gaps and impacted areas of construction projects. Point out the importance of quality management practices in this study of construction projects in Sri Lanka and Gampaha District. And provide an analysis of how project quality management practices were carried out. It is important to note that Gampaha District has a construction background, therefore many projects related to the construction industry previous and ongoing. Among the projects are Gampaha – Colombo new bus stand development, Gampaha city center open public car park development, Gampaha- Ja-Ela bus stand development, Gampaha Public Market Development, and Gampaha Bauddaloka Mawatha Model Street Development Project. The researcher is looking to explore the contribution of project quality management practices to the success of recent projects in Gampaha District. For the success to investigate the effect of quality management practices on a construction projects performance based in Sri Lanka. This the primary focus of study to provide a Ledger over construction projects success. Examine Impact of Quality Management Practices on Performance of Selected Construction Projects in Gampaha district known as a quantitative method of measuring the results. Finally, it examines the effects of quality management practices in Sri Lankan construction projects.

Keywords: *Quality management, performance, quality management process, Quality practices*



Critical Success Factors in Healthcare Project: A study of Public Health Projects in Vavuniya District

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Abstract

This study explores the critical success factors (CSFs) influencing the implementation of public healthcare projects in the Vavuniya District, a post-conflict region in Sri Lanka. Given the increasing demand for effective healthcare interventions in resource-limited settings, understanding the determinants of project success is essential. The research adopts a qualitative approach, utilizing semi-structured interviews with 12 key stakeholders, including healthcare administrators, project managers, and field staff. Thematic analysis identifies six primary CSFs: leadership and governance, stakeholder coordination, resource management, capacity building, community engagement, and effective communication. Findings emphasize that strong leadership, efficient resource allocation, and active stakeholder engagement are crucial for project success. However, challenges such as resource constraints, inadequate training opportunities, and communication breakdowns hinder the achievement of intended outcomes. The study suggests enhancing leadership capacity, improving interdepartmental collaboration, advocating for increased funding, expanding training programs, and fostering inclusive community participation. Despite limitations related to geographical scope and sample size, this research provides valuable insights into healthcare project management in post-conflict regions. The findings contribute to the broader discourse on healthcare project sustainability and offer practical recommendations for policymakers, project managers, and healthcare professionals involved in public health initiatives.

Key words: Critical Success Factors, Healthcare Management, Post-Conflict Healthcare Development, Public Healthcare Projects



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