

Smart Waste Management System For Metropolitan Cities

Literature survey

Ref. No	Category/Topic	Study Description/ Method/ Argument/ Theoretical Approach	Results, gaps, and Conclusions
1	Project Management Models/ frameworks	<p>The first step is to develop global project framework for defining objectives, project life cycle and possible steps for projects repeatability.</p> <p>The 2nd step is to analyse and build project specifications, plans using transition graphs, and performance measurement baselines.</p> <p>Final step is to describe organisation design, roles, job specifications, deliverables and timelines, etc. for project manager and teams.</p>	<p>The project proposed to follow one specific model but at the same time suggests changing the model dynamically with the project needs using modular and flexible approach.</p> <p>The results showed that projects can be managed in a better manner with clear deliverables and milestones using three step approach.</p> <p>The dynamic change in the deliverables/ milestones helps to manage risks and issues.</p>
2	Use of Modelling in Project Management	<p>The hierarchical structure is used to represent the full development life cycle of the software project and provide a view of various parts to the project manager.</p> <p>The interactivity among various components of the projects is defined as relations among objects.</p>	<p>Project activities are represented in text and graphical form.</p> <p>Paper demonstrated the use of various object oriented properties like inheritance, relations, modular, and data encapsulation for sharing information through different phases of the life cycle of the project.</p> <p>Various objects could be reused in different projects for better control.</p>
3	Project Management in IT/ Software Projects	<p>It is proposed the integration of RUP and PMBOK for managing technical software development process of product lifecycle and management of project lifecycle respectively for efficient and effective management of</p>	<p>The organisation would be able to automate various activities/ tasks in software development processes and project management with the integration of RUP and PMBOK methodologies.</p>

		projects and delivering high quality products.	Using the capabilities of both RUP and PMBOK project manager would be able to manage projects more efficiently. This would in turn lead to better quality products.
4	Managing Projects in R&D organisations	<p>This had been used at systems management office at NASA Langley Research Centre.</p> <p>R&D enterprises being knowledge intensive, therefore more emphasis has to be on knowledge management.</p>	<p>This methodology also takes care of improvements in processes and policies.</p> <p>This research confirmed that knowledge management system is needed to strengthen the R&D enterprise information system.</p>
5	Empirical and Statistical Analysis	<p>This research studied the application of PMBOK 2008 standard processes to manage Enterprise Project Management (EPM) system in one of the organisations.</p> <p>The authors reviewed how the EPM project was implemented and its status based on the data collected by them.</p> <p>They proposed number of concepts to reduce the time and budget and enhance the system for better efficiency.</p>	<p>The study proposed that critical path management and PERT techniques could be used along with customisation of processes for the needs of the organisation.</p> <p>These methods help to track, monitor and control the projects in a better manner with increased visibility of the critical tasks, activities and parameters.</p>
6	Use of Alternative Methodologies	<p>This study discussed the utilisation of Net Present Value (NPV) as a tool to better project management.</p> <p>Author highlighted the fact for successful monitoring and controlling of the project, NPV should be used.</p> <p>This can be the most important tool for finding the suitable solution.</p>	<p>The author demonstrated that NPV could be one of the most efficient tools for decision analysis and resolution for successful monitoring and control of the project.</p> <p>NPV can provide better budget control and managing the cost and in the process managing the schedule and scope efficiently.</p>
7	Effects of Leadership and Management Qualities of Project manager	<p>This paper studied the effects of leadership quality on the success of different type of projects.</p> <p>Authors studied the impacts of IQ, EQ, and MQ of project manager/leader on the success of the projects with</p>	<p>Analysis showed that there is a relation between EQ, MQ and project success but are moderated differently by the complexity of the projects.</p> <p>EQ and Project success relationship</p>

		<p>different level of complexities.</p> <p>Study used factor analysis and moderated hierarchical regression analysis to analyse various responses and data gathered.</p> <p>Authors also did variance and non-parametric tests to see the means and medians of EQ, IQ, MQ, complexity of faith, fact, and interaction.</p>	<p>is moderated by the complexity of faith, whereas MQ and project success relation is moderated by both complexity fact and faith.</p> <p>Project success is directly affected by the interaction and its complexity.</p>
8	Project Management in Global Distributed Environment	<p>This research explained that small and medium enterprises (SMEs) are also facing huge competition due to globalisation of economies and easier availability of cheaper and good quality products, services across the world.</p>	<p>This paper highlighted that in order to stay ahead of the competition and technology SMEs should focus on to e-collaborations through project management approach.</p> <p>This will ensure them structured processes, better visibility for managing the full life cycle of the project and giving them better monitoring and control of project execution.</p>
9	Project Management Maturity Models	<p>This research paper proposed a maturity model which has three maturity levels with continuous improvement group of Key Process Areas (KPA's).</p> <p>The paper has taken ISO 9001:2000 as base for quality management. Each KPA is mapped onto plan-do-check-act (PDCA) cycle.</p> <p>Conical structure is developed for displaying the gradual development of KPA's in a better manner.</p> <p>KPA's are developed till they attain a dependable maturity level for project management.</p> <p>These KPA's may have to be improved continuously in order to respond to the changes.</p>	<p>By defining KPA's and then improving those continuously using PDCA cycle would enable the organisations to manage the projects more effectively and efficiently.</p> <p>By clear mapping of the KPA's to PDCA cycle, organisation would be able to improve the management and delivery of projects continuously.</p> <p>Thus organisations can work to optimise the processes for effective and efficient delivery of the projects.</p>