Shahu, S.R., Iyer, A. and Tawalare, A.G., 2024. 'Plan of action' for organisational change: A case study of Indian public sector construction organisation. In: Sandanayake, Y.G., Waidyasekara, K.G.A.S., Ranadewa, K.A.T.O. and Chandanie, H. (eds). *Proceedings of the 12th World Construction Symposium*, 9-10 August 2024, Sri Lanka. pp. 827-838. DOI: https://doi.org/10.31705/WCS.2024.66. Available from: https://ciobwcs.com/papers/

'PLAN OF ACTION' FOR ORGANISATIONAL CHANGE: A CASE STUDY OF INDIAN PUBLIC SECTOR CONSTRUCTION ORGANISATION

S.R. Shahu¹, A. Iyer² and A.G. Tawalare³

ABSTRACT

Recently, one of the Indian public sector construction organisations has adopted appbased work measurement and its billing system to reduce the cycle time in the "Procure to Pay" process. Though it could be a small technological change in the working process that has re-engineered the "As-is" processes, it changes the entire organisational dynamics thereby eliminating gaps in the system. Therefore, this paper provides insights into these change management practices in the public sector construction organisation in the context of implementing technological change in the work process. To develop the "Plan of Action," this study utilised a case study methodology. This 'Plan of Action' consists of the following strategies change initiative, formation of change management team, leadership support and involvement, research and benchmarking, stakeholder involvement and engagement, change resistance and persuasion, mandatory training integration, operational efficiency analysis and stabilisation phase. It is revealed that the organisation required commendable efforts in conceptualising, planning, and executing the change process along with special attention to enhancing leadership participation, increasing stakeholder engagement, and providing extensive instruction, training and support to all employees and stakeholders.

Keywords: Construction Management; Indian Construction; Measurement and Billing Systems; Organisational Change; Public Sector.

1. INTRODUCTION

The construction industry in India holds significant economic importance, contributing about 8% to the GDP and accounting for approximately 9% of total expenditure. The Indian construction industry is rapidly evolving towards digitalisation through the adoption of technological workflows such as e-Tendering, Building Information Modelling (BIM), Virtual Reality (VR). This transition towards digitalisation not only enhances productivity and efficiency yet encourages innovation and competitiveness within the Indian construction industry, positioning it for sustained growth and an

¹ M.Tech Student, Department of Civil Engineering, Visvesvarya National Institute of Technology, Nagpur, India, srushtishahu@gmail.com

² B.Tech Graduate, Department of Civil Engineering, Visvesvarya National Institute of Technology, Nagpur, India, <u>avinash.rajsand@gmail.com</u>

³ Assistant Professor, Department of Civil Engineering, Visvesvarya National Institute of Technology, Nagpur, India, abhaytawalare@civ.vnit.ac.in

increased contribution to the country's GDP in the future. Nevertheless, the adoption of technology in the construction organisation is not an easy task, as it is crucial for the reassessment and restructuring of existing workflows and processes within organisations. It requires not only the adaptation of new technical skills and tools; however, it equally demands a fundamental change in mindset to embrace innovation and leverage technology for enhanced efficiency and competitiveness. The implementation of these new practices within an organisation can be seen as a form of organisational change. Organisational change is an inevitable aspect of organisational existence, driven by various factors such as technological advancements, market fluctuations, and internal initiatives (Buick et al., 2015). Within the construction industry, common organisational change initiatives encompass the adoption of digital technologies, the refinement of management processes, and the adjustment of business strategies. Studies by Rashed and Mutis (2023), Liao and Ai Lin Teo (2018), Wong et al. (2017), Xerri et al. (2015), and Sheng-Pao Shih et al. (2013) have been limited to the application of organisational change management strategies within a specific domain and a limited number of projects in the organisation.

Organisational change management encompasses various methodologies aimed at facilitating the successful integration of transformative endeavours (Kasana et al., 2023). Effective change management is essential for the success and adaptability of an organisation in today's dynamic business environment, as poorly executed change can adversely affect performance (Xerri et al., 2015). Managing organisational change involves systematically planning and implementing modifications within the organisation (Kasana et al., 2023). To overcome the persistent obstacles related to the industry's adoption of change, both practitioners and researchers have increasingly explored strategies for managing organisational change that have been linked to successful adoption outcomes (Maali et al., 2022). According to Liao and Ai Lin Teo (2018), the MIT90s framework provides a valuable tool for comprehending organisational transformation in the context of adopting new technologies. This framework encompasses various elements, including strategy, organisational structure, business processes and infrastructure, and culture. Similarly, Errida and Lotfi (2021), in their study of change implementation within a Moroccan construction company, examined two models of change i.e. (i) the Processual model and (ii) the Descriptive model. A processual model establishes the procedures for executing and supervising change. The primary variables and factors influencing organisational performance and the success of organisational change are outlined in a descriptive model. By employing strategies such as clear communication, stakeholder engagement, and skill development, the industry can enhance its capacity to manage change effectively among practitioners, thereby maximising its economic impact. Lines and Vardireddy (2017) have stated that effective change management strategies are skills that can be acquired because each practice involves specific steps that professionals in the industry can implement to enhance the likelihood of successful adoption of change. However, since public sector companies have intricate hierarchies, implementing these strategies into effect can be difficult.

The internal structures of these organisations are frequently imposed by governmental regulations and display resistance towards change and the delegation of authority. In the examination of the City Works Department of Rotterdam's case study on organisational change, a theoretical framework has been introduced by Van der Voet et al. (2016) that

highlights important elements observed in public sector organisations, such as transformational leadership and a commitment to change. Abdulraheem et al. (2013) investigated planned organisational change in the Nigerian public sector and concluded that understanding the values of the society in which an organisation functions is necessary before developing change initiatives. In their study of change management in the public sector of New Zealand, Ahmed et al. (2015) have determined that external environmental pressures serve as the primary catalyst for reform within public sector organisations, alongside the influence of various stakeholders on organisational change. Furthermore, considering the distinct difficulties confronted by public sector entities in the Indian construction sector, such as administrative obstacles and aversion to modification, it becomes crucial to customise change management approaches to tackle these hindrances.

Recently, the Indian public sector construction organisation has adopted app-based work measurement and its billing system to reduce the cycle time in the "Procure to Pay" process. However, it is a small technological change in the working process that has reengineered the "As-is" processes; also, it has changed the entire organisational dynamics thereby eliminating gaps in the system. The app-based measurement and billing system includes features such as automated cost calculation upon updating the measurement book, automated bill generation and processing, which eliminates the need for manual data entry in physical measurement books and reduces the likelihood of errors. The ERP integration of the system enables stakeholders to directly view and process bills within the system itself once forwarded, thereby enhancing transparency. It is a technological advancement of the traditional measurement and billing techniques that are prevailing in the industry. Therefore, this study seeks to explore the complexities of technological changes through the perspective of organisational change management. Therefore, this research aims to define standardised organisational change management processes i.e. 'plan of action' to implement technological change in the working of public sector construction organisations.

2. LITERATURE REVIEW

The literature review was performed to understand the processes of change management in various organisations. It was found that a systematic 'plan of action' is required for implementing change effectively. The 'plan of action' encompassed several steps, including identifying the need for change, developing a vision, providing clear communication to the team, involving stakeholders, managing resistance, and monitoring and tracking the change.

The literature focused on the necessity or need for change as the first step. To implement a planned change, leaders must provide evidence for why it is necessary and persuade influential external parties and employees of the organisation (Talim, 2012). In their study, Kasana et al. (2023) stated that the Facility Management professionals were tasked with rapid and extensive operational shifts that underscored the need for change in response to the pandemic's challenges. The theory of transformational leadership also emphasises the need for change (Van der Voet, 2014). After identifying the need for the change, the process of convincing people usually begins with developing an appealing vision of the change. Rashed and Mutis (2023) stated that clear communication of the organisation's goals of steering away from the traditional method and shifting towards new technologies gives a clear vision to employees and clarifies the confusion about the

need for this change implementation. To meet schedules, budgets, and the needs and expectations of employees, project teams ought to try to create a clear and unified vision (Kim et al., 2017). Employees must comprehend the goals that need to be met and the direction of the change. A well-defined vision provides clarity and reduces uncertainty among employees, thereby securing their buy-in and support (Buick et al., 2015).

Leaders or powerful coalitions within organisations can serve as agents to develop a vision for change. Employees are more inclined to commit to the change and provide support when they witness their senior managers investing time and energy in implementing change (Jurisch et al., 2013). Top management involvement during the adoption process is frequently mentioned as a strategy to establish and sustain momentum for a change initiative (Maali et al., 2022). While there is a lot of emphasis on the role senior management plays in initiating change, direct supervisors are just as important in executing change in public sector organisations (Van der Voet, 2014).

A wide range of stakeholders, including common citizens, politicians, government agencies, and even government departments, are involved in many public projects. Identifying the stakeholders who are affected by the change is very important to understand the potential impacts of the change. Public projects are more prone to changes in expectations and the environment due to the scrutiny of public opinion (Jurisch et al., 2013). According to Errida and Lotfi (2021), assessing the readiness level of stakeholders requires understanding their perceptions of change. Hence, stakeholder engagement is a critical element that can influence the success of change management initiatives. After analysing the stakeholders, change processes must be tailored to the specifications or situations of specific organisations, with goals and plans that are contextually appropriate (Buick et al., 2015). Good planning highlights the significance of the plan's execution in addition to developing a well-structured plan. It is thought that the commitment of team members responsible for implementing the strategy is critical to its success. As a result, the quality of the planning process has an immediate effect on the effectiveness of the final plan (Talim, 2012). Consensus building is a crucial aspect in the face of resistance to change. Management must articulate a clear and comprehensive purpose to the appropriate audience (Wang et al., 2013). Individuals respond differently to organisational change.

Rashed and Mutis (2023) indicated that the organisations with the greatest chance of overcoming employee resistance to change are those that involve employees in the decision-making process for change or the implementation of novel processes and methods. Employee awareness of the change's goals and direction is necessary for its effective implementation. Employee support for the change is increased when there is clarity as it reduces uncertainty (Buick et al., 2015). Therefore, rather than employing a single approach that works for everyone, managers ought to speculate about various approaches, such as those related to communication, training, and support, for each stage of the process.

In addition to minimising resistance from employees, sustaining the process requires adequate resources, which are essential for effective change management. The impact of resources on meaningful planned change is formidable. The presence of resources enhances the influence of awareness, self-efficacy, planning quality, and leadership effectiveness (Talim, 2012). Almost all organisational changes result in changes in the behaviour of organisational members. Regular get-togethers and casual talks can be

utilised to keep employees informed about any changes and allow them to modify their behaviour as necessary to encourage effective interaction between employees and managers (Buick et al., 2015). Effective and open communication lowers resistance to change and increases employee acceptance of deviations from the status quo, which improves the efficiency of the organisation (Rashed & Mutis, 2023). Meaningful changes can be measured by their ability to deliver benefits. Hence the last stage is proper monitoring, tracking, and measuring to ensure ongoing progress of the change. To track the progress of the change, it is important to develop and establish metrics, as well as utilise milestones and tools (Errida & Lotfi, 2021). Thus, the literature review provided various theoretical frameworks for organisational change management practices. This study aims to examine change management practices within public sector construction organisations, specifically in the context of implementing technological changes in work processes.

3. RESEARCH METHODOLOGY

This study's research methodology was primarily a case study approach. A case study approach provides rich insights and in-depth analysis by facilitating an in-depth examination of a specific phenomenon within its real-world context (Yin, 2018). The study focuses on the successful implementation of organisational change in a public sector organisation within the Indian construction industry. The complex nature of the Indian construction industry, particularly within the public sector, presents a unique set of challenges and dynamics that necessitates a detailed examination. A case study within the Indian public sector is crucial to illustrate how change can be practically observed and handled in a construction organisation. By concentrating on a public sector organisation, this study enhances the understanding of the complexities involved in implementing organisational change and addresses a critical gap in the literature concerning the applicability of change management principles within the construction sector in India.

Yin (2018) recommends selecting a single case for study when the case is unique, exhibiting characteristics not found in other cases, or when it is a typical case involving the implementation of a specific project. By selecting a single case organisation within the Indian construction industry, the researchers were able to identify the unique challenges, strategies, and outcomes associated with the change implementation. This approach allowed for a comprehensive examination of the entire change process, from strategic planning to frontline implementation, within a real-world setting. The selection criteria for the case study organization were primarily because it is a public sector entity that has recently introduced an app-based measurement and billing system. This development represents a significant step towards incorporating technology into the construction industry in India and involves the implementation of organisational change management practices. Additionally, gathering insights from the organisation facilitated a thorough exploration of the perspectives of various stakeholders involved in the change, providing rich insights that could inform broader understandings of change management practices. The major approach to collecting data was semi-structured interviews with key stakeholders involved in the organisational change process. The interviewees encompassed 22 individuals from various levels of the organisation, including five members from the leadership team, seven members from the change management team, and ten employees who are the end users of the change. The participants of these interviews were selected through the purposive sampling method. The interviews were

conducted to gain in-depth insights into the procedures implied by the organisation while navigating through the change under study. The questionnaire starts by asking for a summary of a recent change initiative and the rationale behind it. It delves into how those in charge deal with resource constraints, cultural opposition, and the balance of shortterm demands and long-term objectives. Employee-focused questions seek to identify the personal impact of changes, including initial reactions, day-to-day obstacles, assistance received, and chances for professional development. Finally, it requests suggestions on how to improve the transition process, communication, and support methods, emphasising the significance of considering work-life balance and team dynamics. The leadership team provided insights on the overall perspective and need for the adoption of an app-based work measurement and billing from the strategic point of view. The series of interviews was conducted with the employees who were a part of the software programming team to understand their strategies in designing software and the challenges faced while navigating through the change. In addition, interviews with end-user employees directly affected by changes in the workflow provided insights into how the change impacts them and how the system can better support their performance and adaptability. This primary data was corroborated with secondary data collected such as various orders issued by top management related to the implementation of an app-based system, minutes of meetings finalised in the meetings of top management and software programming team and actual demonstration by end user employees in the field. All the interviews were transcribed in Microsoft Word files. The interview data was analysed by content analysis in N Vivo software-version 11.0.

4. RESULTS AND DISCUSSION

The content analysis is presented in Table 1. This content analysis identified the major themes from the 'plan of action' results derived from the interview data, which are discussed in detail.

Theme	Code	Description	Source	Reference	% of articles quoted			
Change Initiative	CI	Developing a comprehensive change plan aligned with organizational goals.	10	25	45%			
Formation of the Change management team	STF	Forming a diverse, skilled team for effective change.	12	29	55%			
Leadership Support and Involvement	LSI	Ensuring top-down support and communication of vision	8	20	36%			
Research and Benchmarking	RB	Best practices identification and lessons learned.	12	30	55%			
Stakeholder Involvement and Engagement	SIE	Inclusive decision- making and collaboration.	9	20	41%			

Table 1: Content Analysis of conducted interviews

Theme	Code	Description	Source	Reference	% of articles quoted
Change Resistance & Persuasion	CRP	Proactive resistance identification and persuasion efforts.	18	32	82%
Mandatory Training Integration	MTI	Train-the-trainer approach for skill development.	10	26	45%
Operational Efficiency Analysis	OEA	Analysing performance metrics for operational optimization.	19	34	86%
Stabilisation Phase	SP	Ensuring smooth transition and adoption of new processes.	16	33	73%

4.1 CHANGE INITIATIVE

The enforcement of state government orders and guidelines played a substantial role in initiating the change. The Central (Federal) Government owns the case organisation. On one project, the organisation was working for another State Government Organisation. This client organisation wanted to reduce the paperwork in the billing of work-related constructions. For this purpose, the top management of the case organisation implemented the billing software throughout the organisation. The higher management representative emphasised in the interview that "Electronic measurement book is like a new concept stepped ahead towards and it's the first transactional portal of one of its kind in the country." The objective of implementing an app-based measurement book and billing system was to decrease cycle times and enhance effectiveness. However, this was not an easy task. The case organisation initially needed to identify and streamline its processes, particularly in the procurement-to-payment cycle. The organisation developed a comprehensive plan outlining the scope, timeline, and resources required for successful implementation, providing a roadmap for the change process. Thus, the top management tried to examine the need for the change and this initiative exemplifies a forward-thinking, positioning the organisation to adapt to contemporary challenges and capitalise on emerging opportunities. The top management communicated the vision and objectives of the change initiative to all levels of the organisation. The organisation's change initiation aligns closely with the theoretical frameworks and practical insights provided in the literature review (Talim, 2012), setting a solid foundation for successful implementation.

4.2 FORMATION OF CHANGE MANAGEMENT TEAM

After deciding to adopt the app-based billing system, it was necessary to determine who would be responsible for its implementation. There are always two options: first, to have the work completed by an external agency, or second, to have it done by the internal team. The handing over of work to an external agency always burdens the financial resources of the organisations. In addition, the external agency requires considerable effort and time to understand the processes of another organisation. Hence, it was decided to trust the internal talent of the organisation. A proactive, cross-functional change management team was formed to spearhead the initiative, comprising individuals with relevant expertise and representation from key departments. Change agents were selected based on their talent, reputation, and proactive nature. The role of software engineers is to

develop the software, which will impact the operations of both the Construction Department and the Finance and Accounts Department. Therefore, the change team consisted of Civil Engineers, Software Engineers and Finance and Account Department officers. The change team worked closely with senior management and other stakeholders to align the change initiative with the organisation's strategic objectives and priorities, ensuring that it was integrated into broader organisational plans. Change agents played a crucial role in facilitating dialogue and building consensus among stakeholders. The formation of a proactive, cross-functional change team comprising individuals with relevant expertise and representation from key departments was a commendable approach. Thus, the diverse composition of the change team ensured comprehensive support to key areas affected by the change initiative.

4.3 LEADERSHIP SUPPORT AND INVOLVEMENT

The leadership provided unwavering support to the change management team and completely trusted the talent of internal employees. The change management team prepared the schedule of the work inclusive of time-bound review meetings with top management. Regular updates and progress reports were provided by the change management team to leadership. In addition, leadership gave regular feedback and ideas to the change management team. This was successful in maintaining the momentum and accountability of the change process throughout the software development phase. Contingency plans were developed to address potential challenges or setbacks, ensuring that the change initiative remained on track despite any unforeseen obstacles. However, the top-down approach prioritised the direction and decisions of senior leadership, and potentially overlooked the valuable insights and perspectives of the internal and external stakeholders within the organisation. This led to resistance from employees during the implementation phase of the software, as many felt excluded from the decision-making process.

4.4 RESEARCH AND BENCHMARKING

The leadership had shown complete trust in talent of the internal change management team. This team had not left out any efforts to let down this trust. The members of the change team conducted extensive research to identify best practices and gather insights from similar initiatives in other organisations. The change management team in their interview specified that "The process which has been implemented and ongoing in other organisations acted as a motivation for the change team to move forward with the request of the described change". These Research findings were shared across departments and functions, fostering a culture of learning and collaboration. This collaborative approach enhanced the organisation's readiness for change and fostered cross-functional alignment, ensuring that all stakeholders were aligned. By delving into existing literature and analysing scholarly articles, the organisation ensured a robust understanding of best practices and theoretical frameworks in change management thereby implementing them practically in their domain. The organisation's commitment to conducting extensive research and benchmarking reflects a commendable level of thoroughness.

4.5 STAKEHOLDER INVOLVEMENT AND ENGAGEMENT

The leadership team actively involved stakeholders and employees in designing and implementing the change initiative, recognising the importance of their input and support

for its success. The organisation's leadership team actively engaged employees across various branches and regions, soliciting their opinions and feedback on the proposed changes. The leadership team justified the inclusion of stakeholders "The change involves a first transactional portal in the organisation which has the stakeholder access to the portal. Hence, digital acceptance of agreements can be done without getting the stakeholder physically in the process". This inclusive approach ensured that diverse perspectives were considered in the decision-making process. External stakeholders, including suppliers, contractors, and regulatory bodies, were also consulted and engaged throughout the change process. The system has a separate login for the stakeholders to help them adapt and understand the significance of the change. The organisation's approach to engaging employees and external stakeholders appears commendable, particularly in soliciting diverse perspectives and fostering collaboration. However, it lacked specifics regarding the depth of engagement and the effectiveness of feedback mechanisms. Leadership and the change team need to move past mere consultation to genuinely empower both employees and external stakeholders in the decision-making process. The major drawback identified here was that the stakeholders were not given adequate training to use the portal effectively. Hence, organisations implementing similar changes must recognise that merely involving stakeholders in decision-making is insufficient. It is essential to focus on their training and active involvement in the change implementation process, which will enhance their adaptability and reduce resistance to the change.

4.6 CHANGE RESISTANCE AND PERSUASION

"Reaction of the employees to change can be of different types, some have interest in learning new things and some people have irritation in adoption of new system so they try to behave in such a way that the change cannot be implemented". To understand such reactions of the people, the RAMA Principle (Rejection, Annoyance, Mellow, and Acceptance) was utilised by the change team to proactively identify and resolve this resistance to change. Regular meetings, awareness weeks, and internal marketing strategies were employed to communicate the benefits of the change initiative and address concerns raised by employees. Individuals facing disadvantages with the existing system were convinced of the benefits of the change through targeted persuasion efforts, highlighting how the new processes would improve their work experience and outcomes. By employing various communication strategies, such as regular meetings and internal marketing efforts, the organisation effectively communicated the benefits of the change initiative and addressed concerns raised by employees. Targeted persuasion efforts were aimed at individuals facing disadvantages with the existing system to make them understand the positive aspects of the change.

4.7 MANDATORY TRAINING INTEGRATION

The change team strategically implemented a "train the trainer" approach to ensure that employees were adequately prepared for the change initiative. Mandatory training subjects were integrated into the organisation's learning and development programs, ensuring that all employees received the necessary training to effectively transition to the new processes. Ongoing training and skill development initiatives were implemented to ensure that employees remained up to date on the latest developments and best practices related to the change initiative. However, simply integrating mandatory training into existing programs was not found to be sufficient to address the evolving needs and

challenges associated with the change. The users in their interview stated a concern that "All the overshare in-charge should be given training so that the workload can be distributed. So, proper training should be given to all the users so that only one person who knows the software would not be facing heavy workload". Hence, it was found that considering the diverse learning needs of employees, allocating resources effectively, addressing potential resistance, and continuously evaluating the training approach are essential to maximise the effectiveness of the change.

4.8 OPERATIONAL EFFICIENCY ANALYSIS

Key Performance Indicators (KPIs) such as number of purchase orders pushed into the portal, number of purchase orders for which the billing is done, and the time between entering and approval of measurements were established to measure the success of the change initiative, focusing on time savings and cost reduction. Statistical data was used to set performance benchmarks and track progress towards achieving organisational goals. The change team stated that "The offline process used to take 56 days and online takes just ten days, so the change implementation can save a time of up to 46 days and time saved is money saved." This data was analysed by the change team, and it was found that the change resulted in time savings and was subsequently translated to monetary savings. The users of the system in their interview highlighted the advantages of the system as "There is increased transparency of the process of billing and measurement. The manual calculations to be done are being reduced for the engineer in charge. The maintenance of a physical measurement book requires a lot of effort, but electronic measurement is easier to maintain, and clarity would be there". Continuous monitoring of performance metrics allowed the change team to make data-driven decisions and adjust its strategies as needed to optimise operational efficiency. By tracking progress towards achieving organisational goals and making data-driven decisions, the organisation ensured accountability and continuous improvement.

4.9 STABILISATION PHASE

Phased implementation was executed to mitigate risks and ensure a smooth transition from the old processes to the new ones. The organisation facilitated the concurrent use of both the old and new systems during the transition period, providing a safety net to minimise downtime and maintain continuity of operations. Pilot testing of the system was performed, and the organisation believed that "Younger generation members of the organisation were enthusiastic about the opportunity and were keen to learn new technologies". Action-taken reports were generated to document and address any issues or challenges encountered during the stabilisation phase. Troubleshooting mechanisms were established to provide support to users encountering difficulties with the new processes. Teething issues that arose were resolved immediately without inordinate delay. This ongoing support contributed to the successful adoption and institutionalisation of the change initiative. The team stated that "Allowing concurrent use of both old and new systems during the transition period is a pragmatic strategy. It provided a safety net for the organisation, minimising downtime and disruptions to critical processes". This approach acknowledged the challenges inherent in change and offered flexibility to users as they adapt to new systems.

The major problems addressed through the identified practices include managing resource limitations and overcoming resistance to change through effective

communication and leadership support. Additionally, balancing short-term project demands with long-term sustainability goals was crucial in ensuring the successful implementation of technological changes.

5. CONCLUSIONS

This study established the standardised organisational change management processes i.e. 'plan of action' to implement technological change in the working of public sector construction organisations. This study contributes significantly to the field of organisational change management by outlining a precise and practical framework for implementing technology changes in public sector organisations, particularly in the Indian construction industry. By employing a case study methodology coupled with indepth content analysis of semi-structured interviews, the study provides decision-makers with a guide for navigating organisational change. The 'plan of action' for effective change management, including the change initiative, formation of a change management team, leadership support and involvement, research and benchmarking, stakeholder involvement and engagement, change resistance and persuasion, mandatory training integration, operational efficiency analysis and stabilisation phase. The identified themes presented as a systematic 'Plan of Action' indicate the standardised steps that an organisation can undertake to navigate through the change and on a preliminary basis, the organisation can understand the approach to facilitate effective change management in context to technological changes. The 'Plan of Action' provides authorities and public sector managers with actionable recommendations in the context of change management. While global literature on change management emphasises the importance of planned change, including clear communication, stakeholder engagement, and the development of a unified vision, this study's findings highlight unique practices specifically tailored to the public sector in India. Notably, the identified practices place a strong emphasis on inhouse development of systems to manage financial resources efficiently, and the use of the RAMA Principle to address resistance to change, which diverges from the broader global focus on external validation and top-down enforcement. The research findings contribute to the existing body of knowledge on organisational change management and offer valuable insights into the practical aspects of managing change within the Indian construction sector, especially in public sector organisations. By bridging the gap between theory and practice, the study offers actionable recommendations for decisionmakers and practitioners seeking to navigate the complexities of change management effectively.

6. REFERENCES

- Abdulraheem, I., Mordi, C., Ojo, Y., & Ajonbadi, H. (2013). Outcomes of planned organisational change in the Nigerian public sector: Insights from the Nigerian higher education institutions. *Economic Insights-Trends and Challenges*, 2(1), 26–37. https://repository.uel.ac.uk/item/85xy1
- Ahmed, H., Balzarova, M., & Cohen, D. A. (2015). Evolutionary change stimuli and moderators evidence from New Zealand. *Journal of Organizational Change Management*, 28(4), 546–564. https://doi.org/10.1108/JOCM-11-2013-0226
- Buick, F., Blackman, D. A., O'Donnell, M. E., O'Flynn, J. L., & West, D. (2015). Can enhanced performance management support public sector change? *Journal of Organizational Change Management*, 28(2), 271–289. https://doi.org/10.1108/JOCM-12-2013-0249
- Errida, A., & Lotfi, B. (2021). The determinants of organizational change management success: Literature review and case study. *International Journal of Engineering Business Management, 13*, 1-15. https://doi.org/10.1177/18479790211016273

- Jurisch, Ikas, Wolf, & Krcmar. (2013). Key differences of private and public sector business process change. *E-Service Journal*, 9(1), 3-27. https://doi.org/10.2979/eservicej.9.1.3
- Kasana, D., Smithwick, J., Dodd, J., Cavalline, T. L., & Mayo, G. (2023). Successful change management strategies for unforeseen events: impact of COVID-19 on facility management. *Journal of Management in Engineering*, 39(4), 04023016. https://doi.org/10.1061/jmenea.meeng-4870
- Kim, A. A., McCunn, L. J., & Lew, J. (2017). Successful facility change-management practices for retrofit projects: Case study in lighting. *Journal of Management in Engineering*, 33(4), 05017001. https://doi.org/10.1061/(asce)me.1943-5479.000051
- Liao, L., & Ai Lin Teo, E. (2018). Organizational change perspective on people management in BIM implementation in building projects. *Journal of Management in Engineering*, *34*(3), 04018008. https://doi.org/10.1061/(asce)me.1943-5479.0000604
- Lines, B. C., & Reddy Vardireddy, P. K. (2017). Drivers of organizational change within the AEC industry: Linking change management practices with successful change adoption. *Journal of Management in Engineering*, 33(6), 04017031. https://doi.org/10.1061/(asce)me.1943-5479.0000548
- Maali, O., Kepple, N., & Lines, B. (2022). Strategies to achieve high adoption of organizational change initiatives within the AEC industry. *Journal of Management in Engineering*, 38(4), 04022021. https://doi.org/10.1061/(asce)me.1943-5479.0001051
- Rashed, A., & Mutis, I. (2023). Influence of internal factors in construction organizations on implementing integrated project delivery viewed from the organizational change theories. *Practice Periodical on Structural Design and Construction*, 28(4), 04023052. https://doi.org/10.1061/ppscfx.sceng-1322
- Robert K. Yin. (2018). Case study research and applications sixth edition (6th ed.). Sage Publication, Inc.
- Sheng-Pao Shih, Ruey-Shiang Shaw, Ta-Yu Fu, & Che-Pin Cheng. (2013). A systematic study of change management during CMMI implementation: A modified activity theory perspective. *Project Management Journal*, 44(4), 84-100. https://doi.org/10.1002/pmj
- Talim, B. (2012). *Creating a Meaningful Planned Change*. Procedia Economics and Finance, *4*, 140–148. https://doi.org/10.1016/s2212-5671(12)00329-2
- Van der Voet, J. (2014). The effectiveness and specificity of change management in a public organization: Transformational leadership and a bureaucratic organizational structure. *European Management Journal*, 32(3), 373–382. https://doi.org/10.1016/j.emj.2013.10.001
- Van der Voet, J., Kuipers, B. S., & Groeneveld, S. (2016). Implementing change in public organizations: The relationship between leadership and affective commitment to change in a public sector context. *Public Management Review*, 18(6), 842–865. https://doi.org/10.1080/14719037.2015.1045020
- Wang, Z., Lim, B. T. H., & Kamardeen, I. (2013). Change management research in construction: A critical review. Conference Proceedings of CIB World Building Congress 2013, Brisbane, Queensland, Australia.
- Wong, P. S. P., Zwar, C., & Gharaie, E. (2017). Examining the Drivers and States of Organizational Change for Greater Use of Prefabrication in Construction Projects. *Journal of Construction Engineering and Management*, 143(7), 04017020. https://doi.org/10.1061/(asce)co.1943-7862.0001309
- Xerri, M. J., Nelson, S. A., Brunetto, Y., & Reid, S. R. M. (2015). NPM and change management in asset management organisations. *Journal of Organizational Change Management*, 28(4), 641–655. https://doi.org/10.1108/JOCM-11-2013-0222