

The Role of the CIO and the CDO in an Organization's Digital Transformation

Bibliographic data

The completed research paper was written by Penny Ross, John Ward, and Elizabeth Daniel, entitled: "Dynamic Capabilities for Information Systems Project Portfolio Management". It was published in 2014 in the Journal of Strategic Information Systems, Volume 23, Issue 1, March 2014, Pages 1-14.

Theme of the paper

The paper aims to explore the dynamic capabilities required for effective Information Systems Project Portfolio Management (IS PPM). It addresses the lack of research on IS PPM's constituent practices, effectiveness, and adaptation to changing business conditions. It emphasizes the practical relevance of studying situated practices and their impact on IS strategy. By studying these areas, the paper aims to contribute to the understanding and practical application of IS PPM and its role in achieving strategic alignment within organizations.

Synthesis of the paper

The motivation behind this research is driven by the need to bridge the gap in existing literature regarding the specific practices and adaptation of Information Systems Project Portfolio Management (IS PPM), emphasizing the practical relevance of studying situated practices and their impact on IS strategy. The authors aim to explore the dynamic capabilities required for effective IS PPM and provide empirical evidence of their adaptation in response to changing business conditions.

In the background information presented, the paper establishes the critical role of IS PPM in strategic planning and management. It highlights the need to align IS strategy and business objectives for organizational success. The authors emphasize the importance of dynamic capabilities, which involve adapting and changing resources in achieving strategic alignment and responding to evolving business conditions. However, the existing research in the field has primarily focused on macro-level issues across firms, necessitating a more detailed examination of situated practices in IS PPM.

The main findings of the research identify four constituent dynamic capabilities of IS PPM. The first dynamic capability emphasizes using business objectives to drive projects, ensuring that strategic objectives guide project investments from the outset. This approach enables organizations to align their project portfolio with their business goals. The second dynamic capability involves employing multiple and dynamic prioritization criteria, allowing organizations to evaluate and prioritize investments using varied criteria that can be adjusted over time in response to changing business conditions. This flexibility enables organizations to allocate resources effectively based on evolving priorities. The third dynamic capability focuses on the dynamic balancing of risk and reward. Organizations need to assess and manage risks associated with their project portfolio. This capability enables them to balance the potential rewards of projects with the risks involved, both at the project level and within the overall portfolio. By adjusting project selection criteria to reflect economic conditions, organizations can maintain an appropriate level of portfolio risk. Finally, the fourth dynamic capability

highlights the ability to cancel, postpone, or reconfigure projects, even those already in progress. This flexibility allows organizations to respond to changing circumstances and reallocate resources to projects that align better with their strategic objectives. Organizations can make informed decisions to optimize their project portfolio by continuously assessing the value and relevance of projects.

The novelty of the research lies in the empirical evidence provided regarding how firms adapt their dynamic capabilities in recessionary conditions, particularly the increased central control over resource allocation. The study also introduces higher-order dynamic capabilities specific to IS PPM, contributing to advancing knowledge in the field. The research concludes that developing dynamic capabilities is crucial for effective IS PPM and achieving strategic alignment between information systems and business objectives.

Furthermore, the study highlights avenues for further research, such as quantifying the benefits of IS PPM, studying the evolution of dynamic capabilities in different business conditions, and exploring the challenges of implementing these capabilities in diverse organizational contexts.

Questions and reflection

Q1: How can organizations effectively measure and quantify the benefits of IS PPM to determine the appropriate allocation of resources?

Q2: How do firms adapt their dynamic capabilities to changing business conditions beyond recessionary periods?

The paper provides valuable insights into the dynamic capabilities required for effective IS PPM and their adaptation to changing business conditions. Identifying the four constituent dynamic capabilities offers a practical framework for organizations to enhance their IS PPM practices. The findings highlight the importance of aligning projects with business objectives, using multiple criteria for project prioritization, balancing risk and reward dynamically, and being flexible in project decision-making.

For future research or professional activity, exploring how organizations can measure and quantify the benefits generated by IS PPM practices is crucial. Additionally, further investigation into the evolution of dynamic capabilities in different business conditions and the challenges of implementing these capabilities in diverse organizational contexts contribute to advancing the field. Overall, this paper provides a solid foundation for future research and offers valuable guidance for practitioners involved in IS PPM.