A Glance into Holistic Project Success with Organisational Agility and Project Resilience

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Abstract: This article delves into the intricate dynamics between organisational agility, project resilience, and project success, casting a new light on the evaluation of project success beyond traditional constraint-based assessments. Through a systematic narrative review, it addresses the critical literature gap by proposing an integrated theoretical framework that encompasses these key constructs. By transcending conventional metrics, the study emphasises a holistic approach to understanding project success, grounded in both classical organisational and complexity theory. This comprehensive framework elucidates the mechanisms through which organisational agility and project resilience directly contribute to project success, advocating for a strategic reorientation towards value creation and adaptability in project management. This exploration seeks to enrich the theoretical foundations of project management and stimulate further empirical research, thereby offering novel insights and practical guidelines for managing projects in the volatile, uncertain, complex, and ambiguous (VUCA) environments of today.

Keywords: organisational agility; project success; project resilience; systematic narrative review

1 INTRODUCTION

In the evolving landscape of project management, the quest for defining and achieving project success has spurred a paradigm shift from traditional metrics to more nuanced and comprehensive measures [1]. Historically anchored in the "Golden Triangle of Constraints" (1) costs (conducting the project within budgetary constraints), (2) time (executing the project within defined deadlines), and (3) project scope (fulfilling client requirements) [2], the discourse has progressively embraced a value-centric perspective, signifying a strategic reorientation of project management towards broader organisational objectives [3]. Emphasising value as a highly pertinent metric for project success situates project management within a strategic context, underscoring the significance of a holistic approach to project management rooted in classical organisational and complexity theory.

Recent research endeavors have increasingly spotlighted organisational agility as a crucial determinant of project success, positing it as an indispensable strategy for navigating the volatile, uncertain, complex, and ambiguous (VUCA) environments that characterise projects contemporary [3, 4]. Despite this acknowledgement, the literature reveals a conspicuous void in systematically exploring how the multifaceted dimensions of organisational agility directly contribute to project outcomes. Concurrently, the concept of project resilience has emerged as a pivotal element for sustaining project success amid disruptions [5], yet, its interaction with and impact on project success metrics remain insufficiently examined.

Addressing these lacunae, this article aims to synthesise the extant body of knowledge, proposing a comprehensive theoretical framework that elucidates the intricate dynamics between organisational agility, project resilience, and project success. This endeavour seeks not only to bridge identified gaps but also to enrich the theoretical tapestry of project management, paving the way for future empirical investigations and practical applications.

The article is structured to first outline the research problem, aim, and scope. It then delves into the foundational management theories that underpin the study, followed by a detailed description of the research method employed. Insights from the systematic narrative review inform the development of a set of propositions that lead to the construction of a comprehensive research framework. The conclusion synthesizes the study's contributions to both theory and practice, setting the stage for future research avenues.

1.1 Research Problem

The research problem lies in the inadequate understanding of the mechanisms and relationships between the concepts of organisational agility, project resilience, and project success due to a lack of research examining their interconnections and influence on project success. Substantive gaps in the existing literature necessitate concerted efforts to enhance understanding in these domains. Additionally, there is a need for theoretical integration of these concepts to form a holistic model for the assessment of project success. The primary challenge confronting this research emanates from the fragmented understanding and insufficient integration of key constructs critical to project management organisational agility, project resilience, and project success. This schism in the literature underscores a significant gap in comprehensively understanding how these constructs interact and the extent to which they collectively influence project outcomes. The existing research, while acknowledging the individual importance of these concepts, has yet to offer a cohesive theoretical model that encapsulates their interdependencies and cumulative impact on achieving and assessing project success within the complexity of contemporary project environments.

1.2 Research Aim

This study is dedicated to advancing the comprehension of synergistic relationships among organizational agility, project resilience, and project success. It aims to develop and propose an integrated theoretical framework grounded in a systematic narrative review of relevant literature. This framework aims to conceptualize the interplay between these constructs, thereby contributing to the theoretical underpinnings of project management. The ultimate objective is to lay a robust foundation for future empirical research, aimed at validating the proposed framework and elucidating strategies and practices crucial for navigating and succeeding in the multifaceted realm of modern, projectoriented organizations. Through this study, the research seeks to fill the existing theoretical voids and to provide actionable insights that can inform and enhance project management practices in the face of ever-increasing complexity and uncertainty.

2 THEORETICAL BACKGROUND 2.1 Reconceptualizing Management Theories

This section delves into the transformation of classical organisational theory in response to the complexities of modern project environments. It underscores the imperative shift towards a more fluid and responsive organisational model, facilitated by the integration of organisational agility. This evolution reflects a departure from static, hierarchical structures to dynamic systems capable of navigating the unpredictability inherent in today's projects.

The Evolution of Classical Organisational Theory in the Context of Complexity

Classical organisational theory has laid the groundwork for understanding organisational function, emphasizing structure, hierarchy, and efficiency. However, the advent of complexity in modern project landscapes necessitates an evolution from these static views towards a framework that accommodates fluidity and unpredictability [6]. This shift is pivotal as we integrate organisational agility into classical frameworks, proposing a transition towards more adaptable and responsive organisational models. Such integration highlights the necessity for traditional structures and processes to evolve, enabling organisations to swiftly respond to the inherent changes and uncertainties of contemporary projects.

Complexity Theory as a Modern Project Management Framework

Complexity theory offers a profound paradigm for comprehending the intricate dynamics of project environments, suggesting that projects are complex adaptive systems characterised by non-linear behaviour, emergent properties, and self-organisation capacities [7]. This perspective is instrumental in framing organisational agility and project resilience as essential for navigating the complexities of modern project landscapes. It underscores the shift from linear planning and control methods towards strategies that are anticipatory and adaptive, capable of addressing emerging challenges and opportunities.

The term "edge of chaos" has become a focal point in discussions around project management, representing the liminal space where optimal innovation and adaptability occur. This concept, rooted in complexity theory, signifies the importance of systems that are highly adaptive and selforganising [7]. The exploration of this edge - where stability meets instability - demands a re-evaluation of conventional management strategies in favour of approaches that prioritise sense-making, relationshipbuilding, and learning as projects evolve. This understanding emphasises the role of projects as complex adaptive systems and highlights the need for project managers to operate in ways that embrace the emergent, unpredictable nature of organisational activity [7].

Integrating Organisational Agility

Organisational agility emerges as a theoretical pillar within this framework, denoting the ability of an organisation to rapidly adapt to market and environmental changes productively and cost-effectively [8]. It injects a dynamic component into the understanding of organisational behaviour, advocating for flexibility, speed, and proactive change management [9]. This focus challenges and extends traditional management theories, encouraging for a fluid and rapid decision-making process that is crucial in complex project environments.

Complementing with Project Resilience

Project resilience acts as a complementary framework to organisational agility, focusing on the project's ability to withstand, adapt to, and recover from adverse conditions [10]. It enriches management theories by incorporating concepts of robustness, recovery, and adaptation, stressing the importance of not only being agile and responsive but also possessing mechanisms for coping with disruptions. This resilience perspective integrates the ability to anticipate failures and adaptively recover, ensuring project continuity and success [11].

Impact on Project Success

The fusion of organisational agility and project resilience within management theories offers a comprehensive understanding of achieving project success amidst complexity and uncertainty. It underscores a holistic and dynamic view of project management, where success is achieved through strategic agility [12], resilient practices [13, 14], and continuous adaptation. This theoretical advancement enriches the discourse in project management, setting a foundation for future research and practical application in navigating complex project environments.

2.2 Organisational Agility

Organisations in today's VUCA environment, as identified by Bennett and Lemoine [15], place a premium on the capacity for responsiveness and innovation, as emphasised by L. S. Holbeche [16]. Agility is widely regarded as an organisation's ability to swiftly react, adapt, and progress in a shifting environment [16].

Understanding the concept of organisational agility is a challenging and multifaceted issue in academic circles [9], which presents obstacles in grasping its constituent elements. In her comprehensive study, Anna-Theresa Walter [9] distinguishes agile drivers, agility enablers, and agile capabilities as three critical aspects of agility: "Organisational agility is an acquired, constantly accessible adaptive capability that can be swiftly and effectively deployed to the required extent whenever needed to boost business outcomes in shifting marketplaces".

Project managers have consistently emphasised that a universal strategy for project management is insufficient for handling diverse project types [17]. When client requirements cannot be explicitly defined at the beginning of the project, it becomes necessary for project managers to engage in the process of outcome creation, demonstrate flexibility, and exhibit adaptability to ensure successful completion [17].

To promote organisational agility, it is essential to cultivate a mindset that is grounded in the principles of agile philosophy and integrate them into all aspects of corporate culture, both formal and informal [18]. Agile organisations are dedicated to providing continuous value to their clients through constant improvement of their skills and knowledge, as well as innovation [19, 20]. This requires a strong commitment to understanding and prioritising the needs of clients [21]. Agile organisations foster a collaborative culture that allows for the sharing of acquired knowledge and collaboration to deliver maximum value to clients [18]. Additionally, they emphasise the importance of experimentation and involving clients in the creation process to generate new knowledge and strive for innovative products/services [17, 19]. Furthermore, agile organisations are ruthless in eliminating any aspect that does not contribute to the primary goal of providing maximum value to clients [22].

The concept of organisational agility enables organisations to quickly adapt to changing client requirements, develop capabilities that foster innovation, improve market share, facilitate entry into new markets, increase profitability, and reduce costs [23, 24].

The organisation's ability to rapidly acquire knowledge and introduce innovative products allows it to quickly introduce new products into the market, laying the foundation for future growth and contributing to the satisfaction of all stakeholders [25, 26].

In 2018, Rima Žitkienė and Mindaugas Deksnys introduced the Organisational Agility Conceptual Model, comprising four components: agile drivers, enablers, capabilities, and practices [27]. The model can be applied as a process roadmap for decision-making and currently represents the most comprehensive model of organisational agility.

2.3 Project Resilience

As unpredictability and unforeseen events become increasingly prevalent in projects, it is crucial to develop competencies that foster resilience and enable effective management [14]. Crosby defined project resilience as the construction of strength and recovery capabilities from unforeseen events or adaptation to changes [28]. Twelve years after Crosby [14] laid the foundations for building resilience in large high-tech projects, the concept of project resilience remains insufficiently explored in project management [14], indicating a significant gap in the literature. However, researchers have shown a growing interest in this topic in recent years, providing strong confirmation of the relevance of this concept [10].

The concept of project resilience can be viewed differently, depending on the context. Khalil [5] explains the concept of project resilience in various contexts, such as ecological, organisational, engineering, psychological, and socio-ecological [5]. By studying different contexts in which resilience is considered in the literature, Rahi [5] defined two key components of this concept common to all contexts: awareness and adaptability. A project's ability to bridge the gap between available and needed resources relates to its ability to efficiently manage resources to meet client requirements [19]. This ability is associated with the project team's awareness of the available resources, proper allocation, and priority management [5]. On the other hand, the ability to recover from disruptive events relates to the project's adaptability capabilities [5]. The project team needs to be flexible, ready to react quickly, adapt to new conditions, and take the necessary steps for recovery or redirection in case of unforeseen situations [6]. Therefore, the project's ability to bridge the gap between resources and needs pertains to awareness, whereas the ability to recover from disruptive events reflects to the project's adaptability capabilities [5, 10, 29].

Project resilience can contribute to maintaining highlevel project performance by implementing adaptable, systemic, or context-sensitive strategies [24, 30]. When disruptive events occur, project resilience focuses on sustaining high-level project performance and efficient use of resources [31].

Some authors define project resilience as the continuous adaptation and alignment of processes, methodologies, organisational structures, and other factors to respond effectively to disruptive events [5, 32]. Therefore, achieving resilience involves continuously monitoring a project's complexity and uncertainty levels throughout its entire life cycle [31].

In 2019, Khalil Rahi introduced the Project Resilience Conceptual Framework, comprising two primary dimensions: awareness, which relates to a project's capacity to bridge the gap between available and necessary resources, and adaptive capacity, which refers to the ability to recover from disruptive events [5]. Three years later, Khalil Rahi and Mario Bourgault validated a new scale for assessing project resilience, employing the aforementioned dimensions [29]. These studies have made a significant contribution to the literature in the field of project management, thus presenting avenues for further investigation.

2.4 Project Success

Historically guided by the "Golden Triangle", which emphasises project efficiency as the hallmark of success [33, 34], project management predominantly reflects immediate project outcomes, lacking consideration for the broader organisational impact and long-term effectiveness, despite its foundational nature [35].

The complexity, size, value, length, and type of projects have led to a diversification of success criteria, acknowledging that projects cannot be uniformly measured [36, 37]. In recent years, the paradigm has shifted towards a multidimensional construct that incorporates both short-term efficiency and long-term effectiveness, thereby aligning project success with broader organisational goals [31, 38]. This evolution reflects an understanding that project success extends beyond on-time and within-budget completion to encompass the project's impact on stakeholders, its contribution to organisational growth, and its role in future preparedness [38].

The contemporary business landscape demands that organisations adopt a holistic view of success, recognizing the multifaceted consequences of projects. This includes not only the immediate outputs but also the strategic outcomes such as customer satisfaction, team development, and the project's alignment with organisational objectives. As such, project success is increasingly seen as a lever for organisational development, growth, and reputation enhancement.

The 2017 Pulse of the Profession In-Depth Reports by the Project Management Institute highlights the critical role of organisational agility in achieving project success [39]. It posits a direct relationship between an organisation's agility and its ability to meet project goals and business objectives, suggesting that adaptable and flexible project management practices are key to navigating the uncertainties of the modern business environment [39, 40].

The shift towards a multidimensional understanding of project success has significant implications for project management practices. Project managers must now consider a broader array of success criteria, encompassing both efficiency and effectiveness, and align project objectives with the strategic goals of the organisation. This necessitates a more agile and flexible approach to project management, where success is not solely measured by adherence to the original plan but also by the project's contribution to long-term organisational goals and its ability to adapt to changing circumstances.

3 RESEARCH METHOD

This study aims to consolidate existing knowledge and develop a comprehensive understanding of the interplay among three critical topics: organisational agility, project resilience, and project success. By identifying current research gaps and delineating the boundaries of existing knowledge, this article underscores the need for new research directions. A systematic narrative review was chosen as the primary research approach to encompass a wide range of issues, enabling an in-depth study, analysis, and synthesis of the literature [41]. The systematic narrative review is particularly suited for this task due to its capacity to provide extensive coverage of the topics under investigation, facilitating a thorough examination and integration of the literature.

While narrative reviews offer a broad approach, they can be susceptible to biases in literature selection. To mitigate this, a systematic search strategy, informed by clear inclusion and exclusion criteria, was employed to ensure transparency and replicability in the literature selection process. Critical assessments were made to evaluate the relevance of the data extracted, addressing potential transparency issues associated with narrative reviews. To thoroughly cover the literature on project success, organisational agility, and project resilience, Scopus was chosen as the primary database. Scopus is the largest multidisciplinary database consisting of peerreviewed scientific content, making it a relevant resource for performing a narrative review. Following Denyer and Tranfield's guidelines, the review process encompassed planning, conducting, and reporting stages [41].

3.1 Planning the Review

The research protocol in this study is defined by the research questions, search strategy, inclusion and exclusion criteria, database search and duplicate elimination, and data extraction strategy. The following research questions, originated from the theoretical background, were defined to perform the systematic narrative review:

RQ1: In what ways does organisational agility impact project success?

RQ2: How does organisational agility contribute to project resilience?

RQ3: What role does project resilience play in enhancing project success?

To ensure the efficacy of the search strategy, meticulous planning was undertaken to generate accurate answers to the predetermined research questions. Keywords were carefully selected and refined through preliminary searches to confirm their effectiveness. Additionally, a curated list of relevant databases was established, complemented by the development of precise inclusion and exclusion criteria, to guide the literature search process.

Inclusion Criteria: Articles and conference papers written in English, published within the last six years (2018-2023), focusing on the titles, abstracts, and keywords that directly pertain to the research topics.

Exclusion Criteria: Articles published before 2018, as well as books, book chapters, conference reviews, editorials, or any document types other than articles and conference papers. Documents not written in English were also excluded due to language proficiency constraints.

The Scopus database, known for its extensive collection of peer-reviewed scientific content, was selected as the primary source to guarantee access to relevant academic articles. This choice was informed by Scopus's comprehensive coverage and its ability to facilitate a thorough search through titles, abstracts, and keywords. Duplicate entries were systematically removed to streamline the review process.

Following the application of the inclusion and exclusion criteria, the remaining articles were rigorously evaluated against the research questions to filter out any irrelevant literature. The data analysis phase involved an in-depth review of the selected articles, ensuring a focused and relevant synthesis of information pertaining to the research objectives.

This methodical approach to the systematic narrative review is designed to build a robust foundation for understanding the dynamic interplay between organisational agility, project resilience, and project success. It sets a solid groundwork for future empirical investigations within this complex field.

3.2 Conducting the Review

A narrative literature search was performed between December 2023 and January 2024. During this stage, the databases were examined extensively. Tab. 1 demonstrates the utilized string and the generated search output numbers for each database prior to the screening stages, comprising twenty-eight.

After identifying and removing duplicates, the remaining publications were further investigated to ascertain the relation between three concepts: project success, organizational agility and project resilience. Selection of the articles took place after a staged review of their topic, abstract, and conclusion while maintaining the focus on the literature of most considerable pertinence to the research questions. A list of twenty-five articles was shortlisted in the investigation of the concepts. The next stage was to undertake a complete reading of all the shortlisted articles to ensure the articles helped in addressing the research questions. This led to a final shortlist of twenty-one publications which formed the premise for the analysis.

Table 1 Database search results						
Research string	No. documents found	No. of documents within 2018-2023	No. of documents in English	No. of articles	No. of conference papers	No. of studies before the screening stage
"project success" AND "organisational agility" OR "organizational agility"	3	3	3	1	2	3
"organisational agility" OR" organizational agility" AND "project resilience" OR "project resiliency" OR "resilience" OR "resilient" OR "resiliency"	32	26	20	17	3	8
"project success" AND "project resilience" OR "project resiliency" OR "resilience" OR "resilient" OR "resiliency"	55	38	38	28	8	14

Table 2 Journal listing						
Journal Title	Number of articles from the journal	Year of publication				
Heliyon	1	2023				
Administrative Sciences	1	2023				
International Journal of Entrepreneurship and Small Business	1	2023				
Journal of Organizational Effectiveness	1	2018				
Systems Research and Behavioral Science	1	2019				
Technological Forecasting and Social Change	1	2022				
International Journal of Project Management	2	2022, 2021				
Project Management Journal	2	2019, 2022				
International Journal of Managing Projects in Business	2	2022, 2022				
Organization Management Journal	1	2020				
Frontiers in Psychology	1	2022				

Tab. 2 illustrates that the fourteen articles (conference papers were not considered in this analysis) came from eleven journals, with the greatest number of articles published in 2022 over the past five years.

3.3 Reporting the Review

The objective of this phase is to present the systematic narrative literature review on the chosen topic with potentially interested stakeholders by presenting the study's findings. As the study sought to investigate responses to predetermined research questions, a narrative analysis was conducted to shape the results as the examination progressed. Specifically, a narrative thematic analysis was employed, involving five stages: organizing data, forming an overall perspective of the information, coding, identifying categories, and interpretation [41]. Significantly, the codes were condensed into categories to effectively address the research questions. The interpretation phase entailed making sense of the data and extracting meaning from it to provide insights into the utilization of social media in project management.

The narrative thematic analysis of the reviewed literature has revealed a notably limited number of publications associating project success with organisational agility. Publications elucidating the relationship between project success and project resilience, as well as organisational agility and project resilience, have been on the rise in recent years. This trend is evidenced by an increased number of papers identified in the examination of the latest two streams of literature.

It is noteworthy to highlight that the journals encompass a diverse array of disciplines, thereby offering a wide spectrum of topics. However, they all fall under the broader umbrella of organisational studies, project management, psychology, entrepreneurship, and social sciences.

A substantial volume of publications emerged in the year 2022, indicating the novelty and upward trajectory of the topic. Notably, journals featuring more than one article include International Journal of Managing Projects in Business, Project Management Journal, and International Journal of Project Management.

4 THEORETICAL FRAMEWORK DEVELOPMENT FROM SYSTEMATIC NARRATIVE REVIEW INSIGHTS

The theoretical framework presented in this article was developed after careful consideration of various models and theories related to project management, organisational behaviour, and systems thinking. Alternative frameworks were evaluated for their capacity to integrate the concepts of organisational agility, project resilience, and project success. The chosen framework was selected based on its holistic approach, allowing for the examination of direct and mediating relationships among these constructs.

4.1 Organisational Agility and Its Influence on Project Success

Emerging evidence from recent studies underscores the significant role of organizational agility in achieving project success. Kim and Chai (2022) highlighted that organizations with enhanced agility are better positioned to succeed in their ventures, attributing this to their ability to rapidly adapt to changes, make informed decisions, and meet dynamic client needs [42]. Similarly, Piperca and Floricel (2023) found that in the software industry, agile practices significantly contribute to attaining project goals [11]. Rahi and Bourgault (2022) further confirmed this trend within the construction industry, noting that agile organizations achieve improved project performance and heightened client satisfaction [29]. These findings collectively suggest a direct and positive influence of organizational agility on project success, indicating that agility facilitates an environment conducive to achieving and surpassing project objectives.

4.2 Organizational Agility's Role in Enhancing Project Resilience

The capacity of organizational agility to foster project resilience emerges as a prominent theme in the literature. Hoonsopon and Puriwat (2021) identified that agile organizations demonstrate a superior ability to adapt to project alterations, thereby cultivating a higher degree of project resilience [21]. This finding is complemented by Rahi et al. (2021), who reported that organizations with elevated levels of agility possess enhanced capabilities in managing risks and uncertainties, contributing to the resilience of projects [10]. Zou et al. (2022) further explored this relationship in the context of the construction industry, revealing that organizations with higher agility levels are more adept at responding to changes and mitigating the adverse effects of unforeseen events, thus achieving greater project resilience [43].

4.3 Project Resilience as a Contributor to Project Success

Project resilience, as demonstrated by Rahi et al. (2021) and corroborated by subsequent research, emerges as a pivotal component in the architecture of project success. It is characterised by the ability of projects to manage risks and uncertainties more effectively, a capability that can be both anticipated and strategically cultivated [10]. The essence of project resilience lies not just in enduring adversities but in leveraging these challenges as catalysts for innovation and improvement, thus ensuring project continuity and achievement of objectives even in the face of unforeseen disruptions. The attribute of simplified risk and uncertainty management, as demonstrated by projects with heightened resilience, underscores the critical importance of anticipatory planning and adaptive strategies [10]. By embedding resilience into project management practices, organisations can develop robust mechanisms for identifying potential risks early on and deploying pre-emptive measures to mitigate their impact. This proactive approach enables projects to navigate through complexities with greater confidence and agility, thereby safeguarding project success

The correlation between project resilience and project success is further strengthened by evidence showing that resilience empowers project leaders to effectively manage unexpected obstacles [10, 44]. Through the cultivation of resilience, projects are better equipped to withstand disruptions without veering off course. This resilience fosters a project environment where challenges are met with adaptive solutions, ensuring that the project's trajectory is maintained, and its goals are achieved. The ability to mitigate risks through resilience not only enhances the project's success rate but also contributes to a positive outcome for all stakeholders involved.

A core component of project resilience is the capacity for adaptability to changing conditions [26]. Projects that embody resilience are characterised by their flexibility and responsiveness to alterations in their external and internal environments. The development of a well-prepared plan that can be adjusted as needed is crucial for maintaining momentum and avoiding delays. This adaptive planning is not about constant change but about the strategic capability to pivot when necessary, ensuring that the project remains aligned with its objectives despite the volatility of its operating context. The integration of strategies for developing project resilience is a testament to its value in enhancing overall project management [29]. By focusing on building resilience within project teams, organisations can improve their collective capabilities to achieve project goals and deliver substantial value. This involves training teams to recognise and respond to risks proactively, fostering a culture of continuous learning and innovation, and encouraging open communication to ensure that all team members are equipped to contribute to the project's resilience. Such strategic development not only elevates the project's capacity for success but also strengthens the organisation's resilience at a broader level.

4.4 Mediating Role of Project Resilience in Enhancing Project Success

Extensive studies have underscored the direct impact of organisational agility on project success, emphasizing agility as a key determinant for navigating the complexities and uncertainties inherent in modern projects. Parallel to the discourse on agility, the literature also accentuates the critical role of project resilience. Studies across various domains within project management have consistently drawn attention to the significance of both project resilience and organisational agility in fostering successful organisational outcomes [11, 23, 29, 31, 42]. These findings highlight essential shift towards recognizing the dynamic interplay between an organisation's adaptive capabilities and the robustness of its projects against adversities. In this context, resilience acts as a bridge, channelling the benefits of organisational agility directly into the project's success metrics. It posits that the adaptability and responsiveness inherent in agile organisations enhance project resilience, which in turn, contributes significantly to the project's overall success. This dual pathway highlights the multifaceted contributions of agility to project outcomes, where resilience serves as both an outcome of agility and a precursor to success.

4.5 Theoretical Framework Propositions for Project Management Success

Drawing from an extensive literature review, this article proposes a theoretical framework (see Fig. 1) that elucidates the intricate mechanisms through which organisational agility and project resilience interact to influence project success, examined through research questions. This framework, grounded in empirical research, offers novel insights into the complex relationships that underpin project management practices.

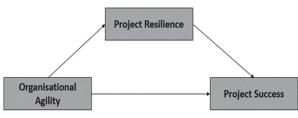


Figure 1 Theoretical framework

Organisational agility is posited as the foundational pillar that undergirds project success. It embodies the capacity of organisations to swiftly respond to market dynamics, technological advancements, and evolving customer needs. Agility ensures that project management practices are flexible, adaptable, and responsive, thereby directly contributing to the achievement of project goals and objectives. This aspect of the framework highlights the direct influence of agility on project success, emphasizing the need for agile methodologies and mindsets in contemporary project management.

At the heart of the proposed framework is the concept of project resilience as a mediating factor. This proposition suggests that the benefits derived from organisational agility such as enhanced adaptability and rapid response to change are actualised through the project's resilience. Project resilience, characterised by the ability to withstand disruptions, recover from setbacks, and adapt to new challenges, serves as a critical mechanism that channels the positive impact of agility into tangible project success. The mediation by project resilience underscores the importance of developing resilient project teams and frameworks that can leverage agility for optimal outcomes.

A direct relationship is identified between organisational agility and project resilience, reinforcing the premise that agile organisations inherently cultivate resilient projects. This connection elucidates how practices *and cultures centered around agility contribute to building* a project's capacity to endure and thrive amid uncertainties. The framework suggests that by fostering organisational agility, projects are endowed with the resilience needed to navigate complex and volatile environments, thereby enhancing their prospects for success.

Propositions of the theoretical framework:

- *Proposition 1:* Organisational agility directly influences project success, underlining the critical role of agile practices in achieving desired project outcomes.
- *Proposition 2:* Project resilience mediates the relationship between organisational agility and project success, serving as a crucial mechanism through which agility translates into success.
- *Proposition 3:* There is a direct and positive relationship between organisational agility and project resilience, indicating that agility fosters resilience within project environments.

Utilising the Organisational Agility Conceptual Model by Žitkienė and Deksnys (2018), it is proposed that organisational agility is to be measured across four dimensions: agile drivers, enablers, capabilities, and practices [27]. This comprehensive model offers a roadmap for assessing organisational agility through: Agile Drivers, Agile Enablers, Agile Capabilities and Agile Practices. Following Khalil Rahi's Project Resilience Conceptual Framework (2019), project resilience is to be measured in terms of awareness and adaptive capacity [5]. This dual-dimensional approach captures the: 1) Awareness - the project team's ability to recognise and understand the available and necessary resources, as well as potential risks and opportunities and 2) Adaptive Capacity - The capability of the project to recover from setbacks or adapt to new challenges through flexible planning, problem-solving, and resource reallocation. Drawing on the model by Shenhar and Dvir [45] and its validation by Ćirić et al. [39], project success is to be assessed through multiple dimensions, including project efficiency, impact on the team, impact on the customer, impact on business and preparing to future.

To substantiate the theoretical propositions outlined in this study, future research directions will include empirical validation of the proposed framework. This empirical inquiry could take the form of quantitative surveys or qualitative case studies across diverse project environments and industries. Such empirical research will aim to validate the relationships between organizational agility, project resilience, and project success, providing concrete insights into the practical applicability and impact of the model in real-world settings.

5 CONCLUSION

This article's exploration into the realms of organisational agility and project resilience through the lens of contemporary management theories marks a pivotal advancement in project management research. By critically reevaluating classical organisational theories and intertwining them with the dynamic capabilities of agility and resilience, the study carves a novel path for both theoretical exploration and empirical inquiry. This approach broadens the academic dialogue surrounding project management and provides tangible strategies for navigating projects in the increasingly complex and uncertain terrains of today's business world [46, 47].

The theoretical contributions of this study are manifold. Firstly, it enriches the project management literature by framing organisational agility and project resilience as integral components of project success, grounded in a well-articulated theoretical framework. This framework revises the traditional views on project success and integrates them with the nuanced perspectives of complexity theory, thus offering a comprehensive understanding of the factors that contribute to the success of projects in volatile environments. Secondly, the thematic analysis conducted herein sheds light on the evolving discourse concerning the synergy between organisational agility, project resilience, and project success. It underscores a growing research interest in these areas, highlighting the emergence of a multidisciplinary dialogue that spans across various fields of study. This interdisciplinary interest lays the groundwork for future research activities, particularly in the empirical validation of the proposed theoretical framework and its constructs.

Practically, this article offers significant insights for project managers and organisational leaders striving to enhance project outcomes. The study advocates for the integration of agility and resilience into project management practices, suggesting that these capabilities are crucial for organisations aiming to thrive amidst the complexities and uncertainties of the contemporary business environment. By adopting this "new ecosystem" for project success, organisations can leverage agility and resilience not merely as strategies for survival but as proactive means to seize opportunities and drive transformative success.

Future research is encouraged to delve into empirical testing of the proposed framework and its underlying relationships. The proposed framework invites empirical research to operationalise these constructs through the specified dimensions and scales, facilitating а comprehensive analysis of how organisational agility and project resilience contribute to project success. By adopting these measurement constructs, researchers can explore the interrelations among these dimensions and their collective impact on achieving strategic project outcomes. Beyond processual and structural considerations, organisational agility and project resilience are profoundly influenced by cultural and behavioural dimensions. Achieving project success through agility and resilience necessitates significant cultural and organizational change. Future iterations of this framework should, therefore, incorporate strategies for fostering an agile and resilient culture within organizations. This includes managing change, overcoming resistance, and embedding agility and resilience into the organizational DNA. A detailed examination of these aspects will provide a more holistic view of the mechanisms through which project success can be achieved in the modern project environment. In recognition of the diverse application of project management practices across sectors, this article advocates for future research to explore the applicability of the proposed framework across different industries. Case studies spanning sectors such as IT, construction, healthcare, and manufacturing could provide a richer understanding of how organisational agility and project resilience manifest and contribute to project success in varied contexts. Such cross-industry examination will enable a more comprehensive articulation of universal and industry-specific strategies for enhancing project outcomes through agility and resilience.

There are limitations to consider within this study. The reliance on theoretical frameworks to construct the proposed model may not fully encapsulate the dynamic and multifaceted nature of real-world project environments. Furthermore, the generalizability of the findings and the applicability of the framework may be limited by the specific contexts in which the research was conceptualised. These limitations underscore the necessity for future empirical research to validate and refine the proposed theoretical constructs, ensuring their relevance and applicability across diverse project management settings.

6 **REFERENCES**

- Hussein, B. (2019). The influence of project characteristics on project success factors. Insights from 21 real life project cases from Norway. *Procedia Computer Science*, 164, 350-357. https://doi.org/10.1016/j.procs.2019.12.193
- [2] Atkinson, R., Crawford, L., & Ward, S. (2006). Fundamental uncertainties in projects and the scope of project management. *International Journal of Project Management*, 24(8), 687-698. https://doi.org/10.1016/j.ijproman.2006.09.011
- [3] Jitpaiboon, T., Smith, S. M., & Gu, Q. (2019). Critical Success Factors Affecting Project Performance: An Analysis of Tools, Practices, and Managerial Support. *Project Management Journal*, 50(3), 271-287. https://doi.org/10.1177/8756972819833545
- [4] Musawir, A. ul, Serra, C. E. M., Zwikael, O., & Ali, I. (2017). Project governance, benefit management, and project success: Towards a framework for supporting organizational strategy implementation. *International Journal of Project Management*, 35(8), 1658-1672. https://doi.org/10.1016/j.ijproman.2017.07.007
- [5] Rahi, K. (2019). Project resilience: A conceptual framework. *International Journal of Information Systems and Project Management*, 7(1), 69-83. https://doi.org/10.12821/ijispm070104
- [6] Lindskog, C. & Netz, J. (2021). Balancing between stability and change in Agile teams. *International Journal of Managing Projects in Business*, 14(7), 1529-1554. https://doi.org/10.1108/IJMPB-12-2020-0366
- [7] Thomas, J. & Mengel, T. (2008). Preparing project managers to deal with complexity - Advanced project management education. *International Journal of Project Management*, 26(3), 304-315. https://doi.org/10.1016/j.ijproman.2008.01.001
- [8] Zighan, S. M. & Dwaikat, N. Y. (2023). Exploring organisational agility in SMEs. *International Journal of Entrepreneurship and Small Business*, 49(4), 561-576. https://doi.org/10.1504/IJESB.2023.132854
- [9] Walter, A. T. (2021). Organizational agility: ill-defined and somewhat confusing? A systematic literature review and conceptualization. *Management Review Quarterly*, 71(2), 343-391. https://doi.org/10.1007/s11301-020-00186-6
- [10] Rahi, K., Bourgault, M., & Preece, C. (2021). Risk and vulnerability management, project agility and resilience: a comparative analysis. *International Journal of Information Systems and Project Management*, 9(4), 5-21. https://doi.org/10.12821/ijispm090401
- [11] Piperca, S. & Floricel, S. (2023). Understanding project resilience: Designed, cultivated or emergent? *International Journal of Project Management*, 41(3). https://doi.org/10.1016/j.ijproman.2023.102453
- [12] Weber, Y. & Tarba, S. (2014). Strategic Agility: A State of the Art. *California Management Review*, 56, 5-12. https://doi.org/10.1525/cmr.2014.56.3.5
- [13] Zhang, S., Zhang, F., Xue, B., Wang, D., & Liu, B. (2023). Unpacking resilience of project organizations: A capabilitybased conceptualization and measurement of project resilience. *International Journal of Project Management*, 41(8). https://doi.org/10.1016/j.ijproman.2023.102541
- [14] Naderpajouh, N., Matinheikki, J., Keeys, L. A., Aldrich, D. P., & Linkov, I. (2020). Resilience and projects: An interdisciplinary crossroad. *Project Leadership and Society*, *1*. https://doi.org/10.1016/j.plas.2020.100001
- [15] Bennett, N. & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. *Business Horizons*, 57(3), 311-317. https://doi.org/10.1016/j.bushor.2014.01.001
- [16] Holbeche, L. S. (2018). Organisational effectiveness and agility. *Journal of Organizational Effectiveness*, 5(4), 302-313. https://doi.org/10.1108/JOEPP-07-2018-0044

- [17] Ćirić, D., Lalić, B., & Gračanin, D. (2016). Managing Innovation: Are Project Management Methods Enemies or Allies. *International Journal of Industrial Engineering and Management (IJIEM)*, 7(1), 31-41.
- [18] Oliva, F. L. & Kotabe, M. (2019). Barriers, practices, methods and knowledge management tools in startups. *Journal of Knowledge Management*, 23(9), 1838-1856. https://doi.org/10.1108/JKM-06-2018-0361
- [19] Holbeche, L. (2019). Designing sustainably agile and resilient organizations. *Systems Research and Behavioral Science*, 36(5), 668-677. https://doi.org/10.1002/sres.2624
- [20] Milenkovic, M., Ciric Lalic, D., Vujicic, M., Pesko, I., Savkovic, M., & Gracanin, D. (2023). Project portfolio management in telecommunication company: A stage-gate approach for effective portfolio governance. *Advances in Production Engineering and Management*, 18(3), 357-370. https://doi.org/10.14743/apem2023.3.478
- [21] Hoonsopon, D. & Puriwat, W. (2021). Organizational Agility: Key to the Success of New Product Development. *IEEE Transactions on Engineering Management*, 68(6), 1722-1733. https://doi.org/10.1109/TEM.2019.2929500
- [22] Green, S. D. & Sergeeva, N. (2019). Value creation in projects: Towards a narrative perspective. *International Journal of Project Management*, 37(5), 636-651. https://doi.org/10.1016/j.ijproman.2018.12.004
- [23] Budiman, M. A., Soetjipto, B. W., Kusumastuti, R. D., & Wijanto, S. (2023). Organizational agility, dynamic managerial capability, stakeholder management, discretion, and project success: Evidence from the upstream oil and gas sectors. *Heliyon*, 9(9). https://doi.org/10.1016/j.heliyon.2023.e19198
- [24] Altay, N., Gunasekaran, A., Dubey, R., & Childe, S. J. (2018). Agility and resilience as antecedents of supply chain performance under moderating effects of organizational culture within the humanitarian setting: a dynamic capability view. *Production Planning and Control*, 29(14), 1158-1174. https://doi.org/10.1080/09537287.2018.1542174
- [25] Shahzad, M., Qu, Y., Zafar, A. U., Rehman, S. U., & Islam, T. (2020). Exploring the influence of knowledge management process on corporate sustainable performance through green innovation. *Journal of Knowledge Management*, 24(9), 2079-2106. https://doi.org/10.1108/JKM-11-2019-0624
- [26] Ramadan, M., Bou Zakhem, N., Baydoun, H., Daouk, A., Youssef, S., El Fawal, A., Elia, J., & Ashaal, A. (2023). Toward Digital Transformation and Business Model Innovation: The Nexus between Leadership, Organizational Agility, and Knowledge Transfer. *Administrative Sciences*, 13(8). https://doi.org/10.3390/admsci13080185
- [27] Žitkienė, R. & Deksnys, M. (2018). Organizational agility conceptual model. *Montenegrin Journal of Economics*, 14(2), 115-129. https://doi.org/10.14254/1800-5845/2018.14-2.7
- [28] Crosby, P. (2012). Building Resilience in Large High-Technology Projects. International Journal of Information Technology Project Management, 3(4), 21-40. https://doi.org/10.4018/jitpm.2012100102
- [29] Rahi, K. & Bourgault, M. (2022). Validation of a New Project Resilience Scale in the IT Sector. *Project Management Journal*, 53(6), 567-594. https://doi.org/10.1177/87569728221114321
- [30] Han, H. & Trimi, S. (2022). Towards a data science platform for improving SME collaboration through Industry 4.0 technologies. *Technological Forecasting and Social Change*, 174. https://doi.org/10.1016/j.techfore.2021.121242
- [31] Savkovic, M., Ciric Lalic, D., Vuckovic, T., Gracanin, D., & Vujicic, M. (2023). Organisational Agility, Project Resilience, and High-Performance Work Practices: A Recipe for Project Success. *Proceedings from the International Congress on Project Management and Engineering*, 227-239.

- [32] Rahi, K., Bourgault, M., & Robert, B. (2019). Benchmarking project resilience. *Journal of Modern Project Management*, 7(1), 6-21. https://doi.org/10.19255/JMPM01901
- [33] Carvalho, M. M. & Rabechini, R. (2017). Can project sustainability management impact project success? An empirical study applying a contingent approach. *International Journal of Project Management*, 35(6), 1120-1132. https://doi.org/10.1016/j.ijproman.2017.02.018
- [34] Bryde, D. J. (2005). Methods for managing different perspectives of project success. *British Journal of Management*, 16(2), 119-131. https://doi.org/10.1111/j.1467-8551.2005.00438.x
- [36] Carvalho, M. M., Patah, L. A., & de Souza Bido, D. (2015). Project management and its effects on project success: Cross-country and cross-industry comparisons. *International Journal of Project Management*, 33(7), 1509-1522. https://doi.org/10.1016/j.ijproman.2015.04.004
- [36] Müller, R. & Turner, R. (2007). The Influence of Project Managers on Project Success Criteria and Project Success by Type of Project. *European Management Journal*, 25(4), 298-309. https://doi.org/10.1016/j.emj.2007.06.003
- [37] Lisher, I. & Shtub, A. (2019). Measuring the Success of Lean and Agile Projects: are cost, time, scope and quality equally important? *Journal of Modern Project Management*, 7, 138-145.
- [38] Shenhar, A, & Dvir, D. (2007). Reinventing project management: the diamond approach to successful growth and innovation. Harvard Business School Press.
- [39] Project Management Institute (2017). Pulse of the Profession.
- [40] Project Management Institute & Forbes Instight (2017). Achieving Greater Agility: The essential influence of the Csuite. Achieving Greater Agility: The essential influence of the C-suite
- [41] Denyer, D. & Tranfield, D. (2009). Producing a systematic review. The Sage handbook of organizational research methods. Sage Publications Ltd., 671-689.
- [42] Kim, M. & Chai, S. (2022). The role of agility in responding to uncertainty: A cognitive perspective. Advances in Production Engineering and Management, 17(1), 57-74. https://doi.org/10.14743/apem2022.1.421
- [43] Zou, X., Yang, Q., Wang, Q., & Jiang, B. (2022). Measuring the system resilience of project portfolio network considering risk propagation. *Annals of Operations Research*. https://doi.org/10.1007/s10479-022-05100-9
- [44] Đaković, M., Lalić, B., Delić, M., Tasić, N., & Ćirić, D. (2020). Systematic mitigation of model sensitivity in the initiation phase of energy projects. *Advances in Production Engineering and Management*, 15(2), 217-232. https://doi.org/10.14743/APEM2020.2.360
- [45] Shenhar, A. J., Dvir, D., Levy, O., & Maltz, A. C. (2001). Project success: A multidimensional strategic concept. *Long Range Planning*, 34(6), 699-725. https://doi.org/10.1016/S0024-6301(01)00097-8
- [46] Zaman, U., Abbasi, S., Nawaz, S., & Siddique, M. S. (2020). Linking sustainability management and success in construction projects: Moderating influence of high performance work systems. *Pakistan Journal of Commerce* and Social Science, 14(3), 661-684.
- [47] Graić, I., Marjanović, U., Grozdić, V., Ćirić Lalić, D., & Lalić, B. (2023). Entrepreneurial Factors Influencing Recovery from Covid-19: A Country-Level Analysis. *Tehnicki Vjesnik*, 30(6), 1880-1887. https://doi.org/10.17559/TV-20230411000524

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