

Chapter 2 Literature Review

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1.Chapter 2: Literature Review

1.1. Introduction

The chapter is a literature review of other literature available and applicable in the study in terms of the focus of the study, which is the effectiveness of Agile Project Management (APM) on the operational effectiveness of startups in the business arena. The review is organised to focus on analysing the principal elements of the research, using agile methodologies as an independent variable and operational efficiency as a dependent variable, and analysing the interrelation

between the variables. The purpose is to provide theoretical and empirical underpinnings that can support the research and point out where knowledge gaps exist.

1.2. The independent variable: Agile Project Management

Agile project management has proven to be more than a software development technique; it has become a rather universal approach to game development among various industries. Agile lays stress on iterative development, cross-functional work, constant feedback, and delivering functional products within short cycles (Amajuoyi et al., 2024). These traits match well with adaptability, customer responsiveness and fast innovation in high-stress areas such as startups. Researchers note that Agile supports the concept of transparency, a reduction in risk via frequent check-ins, and stakeholder engagement (Muhammad et al., 2021).

The most popular frameworks of Agile are Scrum and Kanban, which have diverse benefits, respectively focusing on structured iterations and continuous flow, as well as visualisation. Samarawijaya and Shahbaz (2025) also point out that Agile gives startups an opportunity to construct and iterate products efficiently, particularly in small tech companies with constrained resources and time. Agile readiness, outlined by Sreenivasan and Suresh (2024), is also concerned with organisational culture, the alignment of leadership, and the capacity of the workforce to promote the adoption of Agile. The adoption of Agile may, in turn, fail to bring about the associated operational outcomes without these establishing forces. That is why it is vital not only to evaluate the methodology but to ensure the circumstances that will promote its success.

1.3. The dependent variable: Operational Efficiency

Operational efficiency in startups is the capability to optimise outputs with less input and at the same time retain/enhance product/service quality. This involves efficient management of funds, time, productivity of employees and budgetary control (Rahman, 2024). When speaking of startups, it is usually not easy to obtain high operational efficiency because of such limitations as small sizes of the team, restricted budgets, and unstable customer needs. Kaniz et al. (2025) assert that the project management decisions in startups may play a vital role in their operational effectiveness. Appropriate agile methodologies have the potential to enhance workflow within a firm, eliminating wastage and ensuring coordination within a team, resulting in an incremental performance of the firm's operations. Rahman (2024) goes further to explain how startups that closely match their internal operations to those of the principles of Agile institutions have benefited through enhanced decision-making processes, enhanced flow of communication, and reduced time-to-market. These are the key determinants of survival and competitiveness of a startup, particularly in such industries as digital marketing and product innovation.

1.4. The relationship between the independent and the dependent variables

The correlation between operational efficiency and Agile Project Management has gained increasing support with supporting evidence. Muhammad et al. (2021) made research within the field of IT in Pakistan, and it revealed that the implementation of Agile had an association with improved project delivery, increased stakeholder contentment, and stakeholder flexibility, which were directly linked to efficiency in operations. On the one hand, a similar study by Zare Khafri et al. (2023) proposed the very concept of a Lean-Agile Project Management Office (LAPMO) to illustrate how the combination of Lean and Agile in practice contributes to the enhanced

organisational performance of SMEs. This integration allows the optimisation of processes, reduction of waste, and delivery of value, and all of these lead directly into operational efficiency. Kaniz et al. (2025) stress that due to the use of Agile practices in digital marketing analytics, startups have the potential to quickly test hypotheses, collect information, and guide their missions and implement customer-oriented solutions. It is through this process of hypothesis testing and rapid iteration that Agile makes possible this cyclical state of delivering quick results and realising its benefits to operational excellence and increased agility. Nevertheless, challenges are also indicated in literature.

According to Sreenivasan and Suresh (2024), Agile frameworks hold a lot of promise, but a failing implementation or problems of organisational readiness are the two inefficient outcomes. Agile is not an off-the-shelf program that needs to be implemented and adapted to the size, structure, and culture of the firm. According to Amajuoyi et al. (2024), optimisation of Agile practices using the application of hybrid models or integration with modern digital tools is essential when it comes to maximizing outcomes within high-tech or dynamic settings. The lesson is particularly applicable when developers need to scale Agile on a startup with no resources or maturity in comparison to larger organisations.

1.5. Conclusion

The literature highlights a particular theoretical and empirical relationship between Agile Project Management and operational performance in startups. Agile designs enable startups to maximise responsiveness, productivity, and inventiveness by means of iterative development and in honest time feedback. The practical implementation, however, will depend on Agile readiness, team structure, and type of leadership support. The literature reviewed confirms the hypothesis

that Agile practices have a positive effect on operational performance, but it also describes the implementation gaps and contextual peculiarities. These are some of the ideas used to inform the present study into not only the question of whether or not Agile inclination assists in efficiency, but also how and to what degree it is used in diverse startup contexts and what best practices yield the most outstanding results.

References

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