Executive Summary

The Agile business methodology, which promises to improve an organization's capacity to create innovation, has rapidly grown throughout the software industry in recent years. As such, businesses outside the software industry have begun to adopt Agile practices to remain competitive in a quickly changing marketplace.

As such, the purpose of this paper is to analyze the Agile methodology and understand how it does or does not support innovation, both within the software and other industries. This analysis was conducted through case studies of ING Bank, Spotify, the use of Agile in the construction industry, and findings from AER1601's report regarding the use of Agile in Safran Landing System's development of landing gear.

ING Bank and Spotify have both adopted what is known as the "Spotify Model," which extends the Agile methodology by using squads, tribes, chapters, and guilds to implement teams which are cross-functional yet align themselves frequently with the goals of their organization. In the construction industry and the study of Agile in landing gear development, it was determined that the Agile approach is beneficial for implementing iterative development, allowing for easier course correction, reduced development time, and reduced development costs.

From these case studies, it was found that Agile is beneficial for increasing productivity and motivation within teams, increases an organization's profit, improves product quality and thus customer satisfaction, and allows organizations to build an emphasis on culture, leadership, and innovation. However, for Agile to be beneficial to an organization, it must be implemented properly and in full. Furthermore, the Agile methodology's success depends on an organization's culture and values and the involvement of the leadership team.

Therefore, while the Agile methodology is beneficial for implementing standardized processes which structure an organization's day-to-day operations, the process of implementing the Agile methodology is what truly creates innovation. In both software and hardware organizations, successfully implementing the Agile methodology means addressing all aspects of the business with full support from management and employees. As a result, the organization will see changes in company politics, employee motivation, team productivity, and task complexity.

Thus, while Agile is an extremely useful business methodology, the practice of undergoing full transformational change throughout an organization is the most important for innovation.