

Title	ソフトウェア開発組織におけるイノベーションの障壁—日本におけるアジャイルソフトウェア開発手法の採否の機序—
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Abstract

This study provides insight into research approaches and empirical evidence pertaining to innovation in service organizations, which is scarce. This study positions agile software development methodologies as an innovation for software development organizations in Japanese firms. The aim of this study is to provide insight into the acceptance of innovation in service organizations through the acceptance event of agile in Japanese software development organizations. The general understanding up to this point is that Japan lags the rest of the world in the adoption and diffusion of Agile software development. However, 20 years have passed since Agile originated, the true reality in Japan is not known. In this study, we assume that the situation in which Japan is lagging in "Agile is adoption, but not deployment and diffusion within the business organization". This leads us to believe that there is no improvement in the number of cases in Japan, and that Agile has not been revitalized. The purpose of this study is to investigate the actual situation and the factors behind the slow adoption of Agile in Japan. This study focuses on the barriers that prevent knowledge-intensive organizations from adopting Agile, or embracing innovation, as a case study of IT organizations in Japan. We will speculate on how organizations are governed by barriers to innovation adoption, or whether barriers can be overcome, and aim to provide suggestions on strategies for the adoption and diffusion of Agile by Japanese IT organizations, which are knowledge-intensive service organizations.

Toward the objectives of this study, we explore three thematic questions about the event: 1) How is the adoption and diffusion of Agile driven, 2) How does the organizational environment affect the adoption and diffusion, and 3) What barriers prevent the adoption and diffusion? The analysis of this study then revealed the following as a result: the adoption of Agile in IT organizations 1) proceeds bottom-up by the field, led by project managers as the driving force that drives the organization to adopt the new methodology. It is important to synchronize and support the concept of Agile with the department heads of the IT organization who are its superiors as an organizational effort. However, 2) Many business organizations do not have an environment that supports the emergence and spread of Agile adoption in the business organization. 3) There are not only barriers to adoption at the development site, but also barriers to the deployment and diffusion of Agile around the development site within the business organization.

Based on the above, this study explains the phenomenon of Agile's standstill in Japan as follows: 1) The business organization does not provide organizational support for deployment and dissemination in response to individual adoption by frontline proponents, and therefore, deployment and dissemination within the business organization does not progress. In such business organizations, the "knowledge barrier" is raised, which postpones the adoption of Agile. This is because that 2) the business organization does not have the environment to be emergent about new initiatives. 3) In addition to these barriers, middle management and back-office departments that support the spread of Agile become "middle-layer barriers," tacitly creating a status quo that further heightens the "knowledge barrier," and thereby This contributes to the procrastination of Agile adoption.

To this point, there has been no model that comprehensively explains barriers to innovation in business organizations, leaving this issue as with short-sighted discussions of "organizational culture" and "organizational perception". This study expands and reconfigures the concept of "knowledge barriers" and proposes a "Barriers to Agile Adoption in Business Organizations Model" as a theoretical model and a practical model to better understand "adoption barriers" and "barriers by the middle class" in this model.

Keywords: agile, service organization, innovation, adoption, barrier