## **Guest Editorial Preface**

## Special Section on Agile or Time-Honored? A Look at Current Best Practices in IT Development

David Paper, Utah State University, Logan, UT, USA

Kelley O'Reilly, Western Michigan University, Kalamazoo, MI, USA

When the Agile Manifesto was originally created in February of 2001 (http://www.agilealliance.org/ the-alliance/the-agile-manifesto/), it foreshadowed a new era of IT design, development and project implementation. In stark contrast to the time-honored, linear and sequential software development process of the waterfall method, the agile methodology emphasizes close collaboration between the programmer team and business experts, encourages face-to-face communication, and embraces the frequent delivery of new deployable business value. These aspects of agile development are typically delivered by tight, self-organizing teams using an iterative, team-based software development approach. Today, agile design, development and project implementation are increasingly common, yet often face challenges due to management support, project management gaps, and developer resistance. It is this context that motivated this special section. Specifically, we were interested in adding to the literature regarding how the agile methodology is genuinely used in practice; additionally, we were curious as to how the agile method is being received by developers and if it is being used holistically or if hybrid or fractional adaptations of the agile methods were employed.

As a newer methodology, agile methods are relatively unexplored in regard to the acceptance of the method, and its experience in practice. To this end, we highlight two interesting manuscripts that delve into the process of implementing the agile method and the resulting outcomes, from the perspective of various stakeholders in the process. These manuscripts make a strong contribution to the literature in this area and provide an "inside look" into the people, processes, and technologies involved with the agile method. Both studies consider their research questions from an exploratory position; both appropriately employ qualitative approaches to understand the agile phenomenon.

In the first paper, "Developing the Product Your Customer Really Wants: The Value of an Agile Partnership," authors Ashmore and Wedlake explore how agile and waterfall approaches impact project decisions, and the design and development of products. In this case study, the authors report how a hybrid approach, combining both agile and waterfall methods during the design phase, resulted in a final product output that was aligned with developer goals and customer need. In this work, the authors effectively argue that development methods should be determined based on output goals and not simply binary evaluations of new vs. old methods. By creating a hybrid approach, the best of each method was coalesced in a novel manner with positive results.

In the second paper, "On Understanding Preference for Agile Methods Among Software Developers," Bishop, Deokar, and Sarnikar use grounded theory to investigate the constructs for preference of the agile method among developers. Their work suggests that these constructs of preference on the part of developers are malleable and can be influenced and modified. This implies

that management teams might be successful in exposing development teams to agile methods in advance of project implementation in order to decrease resistance and develop support for agile methods. Likewise, management teams might benefit from a strategic approach to team forming to improve team performance, output, and retention.

As agile methods become increasingly common and accepted, we encourage others to consider pertinent research avenues to help the IT community as a whole better understand the benefits, and implications of strategically aligning methods with project goals.

David Paper Kelley O'Reilly Guest Editors IRMJ