The contextualisation of an IS artefact: a synthetic framework grounded on a critical realist perspective on the development and deployment of IS development methodology

Daniela Mihailescu  
Jönköping International Business School,  
Sweden  
daniela.mihailescu@jibs.hj.se

Marius Mihailescu  
Jönköping International Business School,  
Sweden  
marius.mihailescu@jibs.hj.se

A dynamic business climate and technological advancements create new opportunities and challenges in the changing environment of IS development organizations. The clear distinction between the development and the implementation of Enterprise Systems software has affected the roles of involved parties, their work environment, and the knowledge needed. In response to the pressure for more efficiency and effectiveness and also flexibility and quality in Enterprise Systems implementations, new development models and methods, such as rapid product development, agile software development, and component-based development, have been suggested and are considered to be beneficial to consultants in their work. Yet, the quality of ES solutions continues to be problematic, resulting in various outcomes and, once again, questioning the value of the new IS development methodologies. What is not always clear from current IS studies, is the fact that IS development methodology represents a multi-perspective and cross-level phenomenon of study.

Over the last decade, different perspectives in research works have tried to address the challenges related to development and deployment of IS development methodologies. We argue that existing fragmented approaches in studying IS development methodology reduces the possibility to understand and explain the challenges encountered by IS professionals in practice. Therefore, in order to develop valuable theories, tools, and educational programs with practical relevance, as several scholars indicate, it is imperative to scrutinize new approaches and provide robust frameworks to study and explain the development, deployment, and the potentials of IS development methodologies.

This work is motivated by the perception that a change of understanding and framing the study of IS development methodology is not only needed but is also a fundamental issue in order to facilitate the design of artefacts based on cumulative and integrated knowledge. This paper proposes to extend the existing body of IS research in general and ES research in particular, by exploring an alternative way to frame the study of ES implementation methodology from a critical realist perspective.

The beneficial feature of this perspective is represented by a theoretical basis which allows to bridge the gap between two significant streams of IS research, i.e. the development and the deployment of IS development methodology. The framework outlined in this study is based on a synthesis of frameworks and theories of the
development and deployment of IS development methodologies, and explores the characteristics and relations between social and technical objects together with potential transformations and implications in a stratified context.