

Technology Implementation 2.0

Ali S. Ghawe, ali.ghawe@queensu.ca; Kathryn Brohman, kathryn.brohman@queensu.ca

Many researchers claim that digital technologies represent technological objects of a different breed. Faulkner and Runde (2013) define them as distinct objects that are not spatial and possess a nonphysical mode of being. Kallinikos et al. (2013) differentiate digital from traditional technologies based on five unique characteristics: editability, interactivity, reprogrammability, openness and distributedness and claim that digital objects lack the plenitude and stability afforded by traditional items and devices. Digital technologies' five characteristics and nonphysical mode of being lead to their pervasiveness and represent a change in kind when compared to traditional technologies.

For decades, researchers have examined the implementation of technology objects that are assumed to fill a void in organizations (e.g., ERP systems, e-commerce) or completely replace disrupted old technologies. Organizations had to build new capabilities, and endure structural, control and social changes to overcome many barriers before successfully implementing new technologies that were treated as a black box with generic characteristics (Eggers and Park 2018). Earlier scholars have called attention to considering technology characteristics when examining implementation (e.g., Cooper and Zmud 1990). However, there has been little consideration of changes to the actual type of technology being implemented. Furthermore, and despite earlier advice (Gottschalk 1999), research has continued to be overly concerned with single systems or single projects instead of taking a more holistic or Gestalt perspective.

Digital technologies, as a different breed of objects, hold the promise of overcoming many of the implementation barriers, particularly when considered from a holistic perspective. Consequently, it is important to consider the specific characteristics of digital objects in terms of how they may require a different approach to implementation—Technology Implementation 2.0. Thus, our research question is *how the nature and characteristics of digital technologies affect the implementation mechanisms in organizations?*

References

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