MIND – An IT/IS Capability assessment framework

TREO Talk Paper

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Abstract

In today's rapidly changing business climate where the change is fuelled by the pace of digitalization, the IT capability of organizations' is considered of essential value in navigating the emerging business terrains and also as an important source for deriving competitive advantage. Despite this increasing relevance and value, prior studies have not paid much attention to uncovering how to assess and evaluate the IT capability of organizations. A plethora of studies can be found centered around IS capability, however, the these studies have been positioned to investigate the value of IS capability to organization performance, turbulence and firm competitiveness. Although these earlier studies have been very valuable in highlighting the essence of IS capability, we argue that it is equally of value to go beyond this and explore how organizations can be empowered to assess and evaluate there is.

Current IS capability research has provided us with theoretical insights with regards to- definitions of IS capability; the growing value of IS capability; and how IS capability is of essence to a firm's performance, competitive advantage and capacity to navigate turbulent environments. Besides, the exception of efforts such as the ITCMF framework, there still exists a lack of studies aimed at assessing, measuring or evaluating organizational IS capability. In this study, we build on prior research to propose the MIND Capability canvas as a qualitative framework that can contribute to scholarship and to practice with regards to how organizations can assess their IS capability relative to their stated goals. This study leverages existing research to address the aforementioned research gap by focusing on the following specific objective and research question: How can organizational IS capability be assessed? Existing dies have extensively developed various classification of IS capability into basic micro components. Although the classifications do not give us a measure for evaluating/assessing IS capability they however lay the theoretical foundation needed for advancing the MIND capability assessment framework. By leveraging an extensive literature review of IS capability, these prior classifications unveil commonalities. These similarities were then categorized into four macro IS capability dimensions – IS Management **[M]**, IS Infrastructure **[I]**, IS Networking/Sourcing **[N]** and IS & Business Development **[D]** Capabilities.

We adopted the design science research methodology as the underlying research paradigm for the conduct of this research. The underlying principle for the carrying out this research is based on the guiding principles postulated by Hevner et al. (2004). The design of the artifact emerging from the design science research is built on systems theory and on three components/instruments from prior research. i) A categorization of existing IS capability classifications into a MIND matrix ii) An adapted version of the Balanced Score Card and iii) an abstraction from SWOT to form a capability status map. Following the requirements of design science research, the artifact - MIND canvas – has been designed and instantiated via two pilot workshops. One of the pilot was carried out to evaluate the IT capability of a university while the second pilot was a workshop involving nine (9) CIOs of SME companies to inform the design process of the artifact. The next phase in the study is a planned evaluation of the artifact in two case organizations to establish its effectiveness and utility in practice. The chosen cases are midsized Finnish companies with the need to identify the IT capabilities required in order to achieve their ongoing shift towards a digitalization strategy.