

## Where are we going? Using capabilities to study digital transformations of established organisations

The digital transformation of organisations is a topical matter for practitioners (cf. Fitzgerald et al., 2014), policymakers (cf. European Union, 2020), and scholars alike (cf. Warner and Wäger, 2019). ‘Next generation’ digital technologies (Cho et al., 2023), such as Internet of Things (IoT), artificial intelligence (AI), virtual reality (VR), and big data analytics, are presenting organisations with novel opportunities and challenges, with an envisioned potential to transform both their internal and external environment. As stated by Sebastian et al. (2017), digital technologies hence provide ‘*both game-changing opportunities for – and existential threats to – companies*’ (p.197).

However, despite the promise of digital technologies, many organisations are yet to experience its claimed transformative impact (Ghosh et al., 2022; Loonam et al., 2018). While there is a large number of visionary reports picturing a digitalised future (Gong and Ribiere, 2021), and describing digital transformation as a matter of future survival (Sebastian et al., 2017), many established organisations are stuck in procedures of their current businesses and struggle to adjust when faced with this new environment. Consequently, several studies have set out to investigate what organisations need to manage the digital transformation of their businesses, often drawing on the concept of organizational capabilities (cf. Ellström et al., 2021; Ghosh et al., 2022).

Yet, listing generic capabilities is insufficient to guide organisations towards successful transformations. The purpose of this paper is to study the role of capabilities in the process and outcome of a digital transformation. Instead of searching for additional capabilities of importance for a digital transformation, we suggest that we can use capabilities to study the current state and possible way ahead for the transformation of an organisation. Based on a study of the implementation and usage of digital technologies within public water utilities, we aim to answer: *How can organisational capabilities inform us about the process and potential outcome of a digital transformation?* Theoretically, we draw upon the concept of absorptive capacity, which describes an organisation’s ability ‘*to recognise the value of new, external information, assimilate it, and apply it*’ (Cohen and Levinthal, 1990, p.128), where we apply the re-conceptualisation presented by Zahra and George (2002).

Hence, our paper makes several contributions. First, we show that studying the presence (or absence) of capabilities helps us identify organisational specific drivers or hinders to developing these capabilities. Second, we show that, while complementary, the importance of different capabilities is not equivalent for the process of digital transformation. Third, by studying a type of organisation that often is overlooked in these kinds of studies, we highlight the importance of distinguishing between what is, and is not, which allows us to nuance the picture of what a digital transformation may imply. Lastly, we present a typology for four different scenarios of digital transformations.

**Key words:** Digital transformation, established organisations, capabilities, absorptive capacity, public utilities

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