Beyond the Turing Test: Reconceptualizing the Agency of Technology in Service Ecosystems

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Purpose – Since the 1950s, the "Turing Test" was the litmus test of whether people can detect if they are talking with machines or humans. Recently, conversational artificial intelligence (AI) became indistinguishable from human conversation, thus rendering the test obsolete. This milestone is forcing a reconceptualization of actors, their agency and resources in service ecosystems emphasizing the new role of technology in human-machine interaction. In service-dominant (S-D) logic, not only actors act upon resources (Vargo & Lusch, 2011), but also operand and operant resources act upon each other (Peters, 2019). However, while action rests at the core of S-D logic, few studies (Kjellberg, 2019) problematize the making of an actor and its distinction against operand/operant resources.

Design/Methodology/approach – Building upon Kjellberg (2019) who questioned a human-centric approach to actors, we interrogate how S-D logic researchers operationalize both actors and operant/operand resources in definitions, conceptualizations, and boundary conditions. Then, we contrast the S-D logic literature with theories from social sciences including Interpretivism, Institutional Theory, and Actor-Network Theory (ANT) to reveal a more nuanced understanding for the theoretical underpinnings of actors, their agency and resources.

Findings – We propose that a more explicit conceptualization of agency in S-D logic has the potential explanatory power to investigate a post-humanist era in which machines act on par with humans. Our literature review shows that the conceptualization of agency in S-D logic remains unclear and even, in parts, contradictory by attributing intentionality without a nuanced view to actors, resources, and structures. However, we find that S-D logic researchers in practice operationalize agency with fundamental differences against other agency-centric theories in the social sciences, such as Interpretivism (human-centric), ANT (heterogeneous humans and non-humans), and Institutional Theory (structure-actor). S-D logic allows for plurality and integrates multi-philosophical approaches and thereby offers the possibility of creating multifaceted insights regarding the role of technology in human-machine interaction.

Originality/value – We propose that the potential uniqueness of S-D logic is a conceptualization of agency that includes human intentionality, non-human practical accomplishments, and structures for constraining action. This nuanced operationalization of agency can become a productive avenue for future research for human-machine-market interaction, work automation, and technological disruptions.

Keywords (max 5) – S-D logic, artificial intelligence, agency, operant resources, operand resources

Paper type – Conceptual paper

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