

Cognitive technologies as boundary objects in digital place

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Purpose – Boundary objects consist of devices, artifacts, and images that support the construction of meaning by different actors (Carlile, 2002, 2004). By acting and interacting, people even transform subjective meanings into artifacts, assigning meaning to reality, and thereby constructing it. Boundary objects translate, coordinate, and align the perspectives of different parties (Klimbe et al., 2010), but with their plasticity, they remain both adaptable to local needs and robust enough to maintain a common identity across different uses (Mele, Sebastiani and Corsaro, 2018).

We assume that the role of boundary objects is amplified with the advent of digital technologies. Digitalization has generated new spaces for interaction between actors: the number and type of touchpoints has multiplied which, in turn, has led to a higher heterogeneity of actors involved in resource integration and value co-creation (Jaakkola & Alexander, 2014; Shams & Kaufmann, 2016). This means confronting the views of more and different participants and objects, as well as how knowledge is generated from them.

By higher interconnectivity among actors, digitalization has allowed different contexts to start to communicate, where structural boundaries become less meaningful in favor of contextual boundaries, which also include the social aspects of interaction (Corsaro, 2018). This paper explores the role of cognitive technologies as boundary objects in digital space.

Design/Methodology/approach – An interactive, qualitative, case-study approach is adopted to gain insights into the phenomena described. Our cases will include the application of AI, chatbots, virtual assistants and social CRM in different industries. The research follows an abductive research approach, where data collection and analysis, on the one hand, and the search for complementary theories on the other hand, constituted parallel iterative processes. In order to pursue the aim of the research multiple cases have been selected.

Findings –. Starting from the idea that social construction and sensemaking process that transform spaces and create a “sense of place” (Parsons et al., 2017: 143), we will show the way cognitive technologies perform in most cases as boundary objects enacting actors’ interactions and sensemaking in digital space.

Originality/value – Boundary objects are crucial resources, whose dispositional properties can be used and appraised as potentially useful. Specifically, they can gain new dispositional properties through particular resource-integrative processes. The role of boundary objects has been weakly linked to digitalization and cognitive technologies. The issue has also important managerial implications to understand how boundary objects can be used to better govern relationships in digital contexts or across physical and digital.

Key words (max 5) Boundary objects, cognitive technologies, resource integration, interaction, space.

Paper type – Research paper