

EDITORIAL - The Black Quasi-Box

The cover of this issue shows an image of a later version of the legendary Enigma machine – the encryption machine used by the German military during World War II. The embodiment of a black box, it fuelled the imagination of the wider public, historians, novelists and moviemakers alike as a symbol for the secret war waged between the intelligence agencies of the Axis and Allies. Ironically, the very first versions of the Enigma ciphers had already been broken before the war even started turning the black box into a white box. As methods and techniques of encryption became more sophisticated over time, so did the methods and techniques of hacking the code as well leading to innovations in mathematics, statistics and computer science. During the course of the war, therefore, the box switched from black to white and back to black numerous times as each side was trying to outwit the other. In the end, the Enigma machine as an ultimate black box was a myth born during World War II while the breaking of the code was one of the best kept secrets of the Allied forces.

Be as it may, the concept of a black box, used to refer to a system whose internal mechanisms can only be modelled based on the system's input and output, finds its application in a variety of scientific fields including the domain of information systems research and related reference disciplines such as computer science, organization studies and sociology, to name a few. However, with contemporary information and communication technology (ICT), the box is not black because it is hard to come by, as was the case with the Enigma machine and its codebooks, but rather because it has become too complex for anybody to fully comprehend. Indeed, contemporary ICT can hardly be conceptualized as a box anymore since it is increasingly networked and, thus, not confined to the boundaries of institutions, organizations and artefacts it used to adhere to (Kallinikos 2011).

In-formed into binary-based digits, formerly bounded, self-contained technological systems now share a common ground allowing for increased interconnectivity and interoperability (Benkler 2006; Tilson et al. 2010; Yoo et al. 2010). Bereft of a hard-wired purpose, computation affords immense potentialities for innovation (Zittrain 2008) as ICT facilitates surprises or functionalities the initial creators did not anticipate resulting in a complex and unpredictable information environment (Kallinikos 2006; Marton 2009). By the same token, the digital objects that populate this environment defy the logic of bounded entities as well. They are rather computational operations or assemblages of distributed services, data sources and user interaction mediated by bit streams of 0s and 1s (Kallinikos et al. 2010; Faulkner and Runde 2011).

Given these arguments, the metaphor of a black box presents itself as highly inappropriate. A box is a fixed entity with boundaries; contemporary ICT, however, is more like a process of computation rather than a collection of boxed computers. This is not to say that hardware is irrelevant for the functioning of ICT but rather that the materiality of ICT is not what differentiates the Enigma machine from the internet and the services it affords (Orlikowski and Scott 2008). Digital objects have novel properties which cannot be explained with reference to their material bearers (Faulkner and Runde 2011). We are dealing with quasi-objects (Ekbia 2009) and, therefore, the black box presents itself as a quasi-box. It is in this sense that the following papers discuss a wide range of phenomena who owe their intricacies to the digital objects they are related to. Be it the role of ICT in development, the threats that arise from malicious software, the challenges of implementing ERP systems or the peculiarities of open source software, the papers address the black quasi-box that is information and communication technology.

As I am bound to leave the position of Editor-In-Chief of the iSCHANNEL, it seems to be more than appropriate to have a look at what we achieved during the last two years. We re-launched the iSCHANNEL with a new visual identity, improved our web presence and, for the first time, we will publish a special issue end of the year. All of this would not have been possible without our editors and the support of the Information Systems and Innovation Group at the Department of Management, LSE. For this I cannot thank them enough. I am also glad to see that the future of the iSCHANNEL is secured as a new generation of editors will take over and continue to improve the journal. I am certain the iSCHANNEL will be in good hands.

Attila Marton
Editor-In-Chief

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