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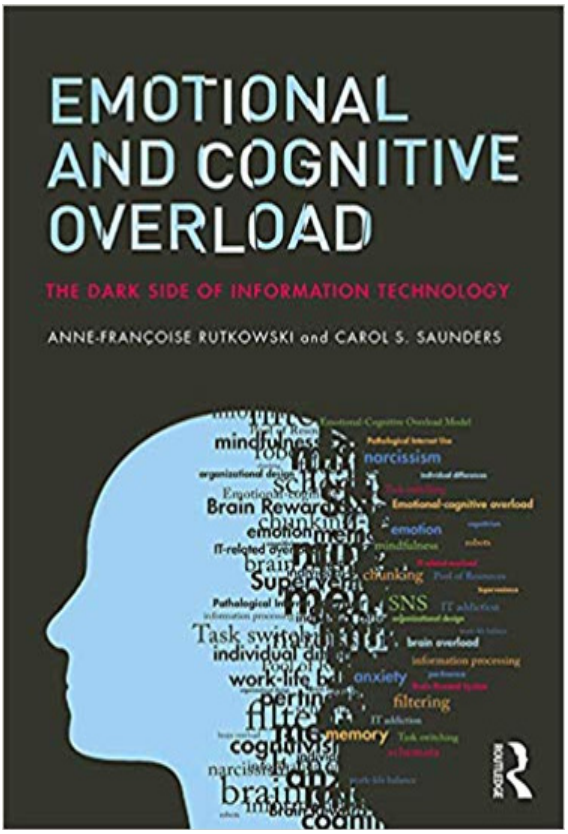
*Book Review*

# When Information Wheels on Technology and Tires Cognition




**Emotional and Cognitive Overload: The Dark Side of Information Technology**

**By**

**Anne-Françoise Rutkowski and Carol Saunders. Routledge, London, 2018, 178 pages, Hardback, ISBN: 9781138053359.**

People today are continuously drowning in information. In the era of information technology, people have constant access to vast information. Our basket overflows. We are getting snowed under multitudes of information. The smoke of confusion wraps our thought, feelings and sense of reasoning. But people have been taught that information is useful, which accelerates more towards drowning than actually needed. Google estimates that there are 300 Exabyte's ($3X10^{20}$ bytes) of human-made information exist today that was just 30 exabytes only four years back. Much more information created in the past few years than the entire human history before us.

In this book, the hitherto mostly unexplored (but not totally) negative sides of IT are discussed. The consequences of the negative sides on individuals, organisation and society are presented through case studies. In chapter 1 entitled "Information technology's dark sides" discussed on brain overload to see the mirror image of information overload, i.e., brain overload. The authors pointed out that 'brain overload' is a better term to describe the phenomenon most commonly called 'information overload'. It is actually the problem of processing the information by the brain. The optimum mindfulness in the context of resource usage has been discussed. Some case studies along with future direction are provided. In the second chapter entitled. "The brain and paradigms of the mind", the emotion and cognition are interpreted from

the viewpoint of both neuroscience research and behavioural research. The reciprocating symbiosis between emotion and cognition are discussed. The models of memory-architecture are introduced here, viz. (a) Modal model (three-store model) for short-term, long-term and sensory memory, (b) The multicomponent model of Baddeley and Hitch on working memory and (c) Bower's associative model of emotional memory. In the third chapter entitled "Individual differences in experiencing IT-related overload", the authors ruled out a mere cognitivist perspective of information overload phenomenon. The Emotional-Cognitive Model (ECOM) of overload based on cognitive theories of memory architecture is proposed that incorporates the key cognitive concepts, i.e., (a) memory-architecture and schemata, (b) pertinence and (c) emotions. The authors described how the ECOM could be used to shed further light on overload issues. The fourth chapter entitled "Information technology as a resource" presented an important inference of Davis (2001) and Caplan (2007, 2010) that personality disorders are cognitive precursors of IT addiction. The use of IT is interpreted here from the viewpoint of a complex cognitive and emotional phenomenon. In the fifth chapter entitled "Dark side of information technology at the organizational level", the negative impact of IT is described from four perspectives, i.e., organizational design and structure, work, people impact and technology. The authors concluded that each has the potential to cause serious damage at the organizational level as well as at individual and even societal levels. Further, the damage can be escalated on interactions among these four factors. The IT dark side diamond is picturesquely presented in Figure 5.1 and clarified in Table 5.1. In the sixth chapter entitled "Measures of IT related overload", the triangulation approach had been developed using both subjective and objective measurements of overload. This approach uses multiple reference points to ensure that the research results are not the product of methodological artefact. The authors concluded here that emotional and cognitive overload might depend on the individual's pool of resources. Some users may use cognitive aspects more, while some users may emphasize emotional aspects. It is thus the combination of both with individuals having their own preferred strategies. This inference has been drawn in a logically compact way. In the last chapter entitled "Leveraging the positive sides of IT", the effective and efficient uses of IT along with prospects (Artificial intelligence, Robotics, etc.) are highlighted. In all, this book gives a detailed view to understanding the negative side of Information Technology. After reading it, people will think twice before relying on IT blindly. The blind reliance on IT is the precursor of thoughtless addiction to it. The consequences of the dark side on individuals, organizations and society are step-by-step discussed logically. The authors presented some measurements for addressing all approaches of IT from diverse perspectives. The concepts of brain overload, techno-stress are both theoretically explained along with case studies. The book carries a message to shed new light on the present-day knowledge society if managed with logical and scientific thought.

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