

# Chapter 1

## An Overview on Information and Communication Overload

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### ABSTRACT

*This chapter presents an overview on information and communication overload. The theme is contextualized and the main concepts are discussed based on the published literature. The individual, the organizational and the social perspectives are considered. To deepen this discussion, the authors developed a bibliometric analysis, which demonstrated the steady increase of interest in this topic, apparently enhanced by new developments in information technology. These technologies have presented solutions for some problems, but at the same time they have raised new issues of information overload. The bibliometric analysis also shows that many of these new issues are communication issues, contributing to justify our argument that, currently, the problems of information overload and communication overload are interrelated.*

### INTRODUCTION

Consider the following quote by Barnaby Rich: “one of the diseases of this age is the multiplicity of books; they doth so overcharge the world that it is not able to digest the abundance of idle matter that is every day hatched and brought forth into the

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world” (Price, 1963). This quote was made in 1613, at a time when books would be quite rare and usually reserved for individuals of relatively privileged social classes. It highlights the difficulty to digest, or internalize, the amount of information that was produced and disseminated. The ability to digest the information you have access to is a factor related to the decision-making capacity. However, it contributes positively to the decision-making process or, conversely, it can cause stress and difficulty (Jackson & van den Hooff, 2012; Mulder, de Poot, Verwij, Janssen & Bijlsma, 2006). From the pieces of information available, books or other, which are to be chosen and digested by a person so that he or she can be properly informed in order to make a decision? What formats and properties should these pieces of information have in order to be digested efficiently and thereby rendered useful? What communication technologies should be used so that a person can receive the information in due time to make a decision?

These and other similar questions are the basic motivation to writing this chapter around the main idea of information overload. In general, information overload relates to the causes, the consequences and the solutions, or countermeasures (Eppler, 2015; Eppler & Mengis, 2004), to situations in which the excessive amount of information prevents people, organizations, and societies, from taking the most appropriate decisions.

The development of communication networks, including those based on the use of Internet has added a new layer to the problem of information overload. In fact, the amount of information that is currently exchanged online, namely through technologies such as email and social networks, force people to face another issue prior to information overload. The traffic information that is exchanged between people, on their individual, organizational or social roles, is now so high that the existence of a problem that can be called communication overload is easily recognizable (Cecchinato, Bird & Cox, 2014; Thomée, Dellve, Härenstam & Hagberg, 2010; Yin, Davison, Bian, Wu & Liang, 2014). Communication overload means that the exchange of information and the communication messages that people deal with exceed their capacity to manage them. This in what regards analyzing information and messages content, filtering out what seems more relevant or that should be given attention to so that contents can be digested.

We believe that these two issues are inextricably linked today: given that currently most of the information is sent and received digitally through online communication networks, and given the amount of communication held and information exchanged, the two problems become interdependent.

The next section of this chapter presents the concepts of information overload and communication overload and their relationship. From that short review, it results clear that a more systematic review of literature is needed. Thus, the results of a starting effort on that review are described in a new section, consisting of a

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