

Chapter 16

Reviewing Information Quality: The Challenge of the “Analytics” Trend

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ABSTRACT

Revisiting a concept is a mandatory approach when new technologies emerge. This chapter presents a reviewed study, based on a previous publication, about information quality. As it happened in the first attempt to study and develop this concept, it remains challenging, as this context contemplates both tangible and intangible observations for two unlimited parts—information and quality—researched isolated, with its own alternatives, methods and objectives for several years and from different points of view. This chapter’s approach is to bring additional work published since the original one and develop conclusions reached at that time, providing a new level of comprehension, which allows the continuity of this debate of information quality, considering the emerging strong trend of analytics processing and informational service offering.

INTRODUCTION

This chapter brings a reflection based on Jamil (2014a), updating the challenges there announced for Information quality and value concepts, specially when addressing the first aspect – Quality – considering new trends of information analysis, management and application, as the “analytics” services and market offers.

The original proposal of this chapter was to discuss information quality and value. These factors must be re-evaluated, as data and information processes face challenging times by the increase in the offer and implementations of new technologies, as those which support big data, internet of things and analytics. Analytics were chosen as the central point for this review of a published chapter, updating its results and appreciation. As the main proposition, Quality and Value regarding information and information management were analyzed, considering those new technologic impacts.

It was previously discussed the fundamentals of quality and value as factors frequently regarded to tangible items, processes or even approached by areas of managerial sciences when evaluating systems

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performance, integration and external relationships with other systems (Huber, 1990; Davenport & Marchand, 2000; SAA, 2013). Authors persist on debating if quality and value are applicable, relevant when analyzing information, data processing, knowledge management and other related factors. It is my point of view that this discussion produces a context of guidance on observing these factors – quality and value – because both are more relevant now, when thinking information management, than three years ago, when this study was started (Amaral & Souza, 2011; Jamil, 2014b; Jamil, 2015).

This chapter intends to reassess the aspect of information quality, focusing specifically analytics trend, as a focal point chosen to bring light to several themes, proposed mainly for technological emerging offers. This conceptual and practical perspectives were addressed in Jamil (2014a), where we posed an invitation to:

the reader to participate in this research, invoking the real need to update - or rethink - this important conceptual base and the opportunity to do so, by bringing case studies and applications which depicts how information quality and value can be perceived in experiments and real work environments.

This study is a comprehensive attempt to precisely rethink that context, as it was proposed in the original research, both justifying its methodological principles, using that base to promote the discussion update and, finally, not reaching a conclusion, as this is a discussion provoked by undeniable practical arenas, expressively present as a trend in nowadays competitive scenarios.

This chapter reviews the original conceptual discussion about quality and value aspects, inserting analytics and other participative concepts to promote the study update. At the end, some reflections, comparing the original results from the previous publication, aiming to promotion of this permanent discussion – information quality – are produced, offering to the reader a continuation perspective for these analysis, towards considering practical applications.

It was kept the fundamental of information importance, both as an isolated concept and as a practical communication process for organizations, as it continues to be one of the most discussed arguments in the last years (Davenport & Marchand, 2000; Choo, 1996; Choo, 2005; Jamil, Santos, Alves, & e Furbino, 2012; Albescio & Pugna, 2014). Its valuable relationship as a concept, as a “thing” and as “a process” (Allen, 1996), when relating to data, knowledge and intelligence, also produces more impacts as a contributive theoretical part for information systems, information technology management, strategic information, marketing information, big data processing and analytics, among several other fields, (Davenport & Prusak, 2000; Cao; Zhang & Liu, 2006; Laudon & Laudon, 2009; Kimball & Ross, 2010; SAS, 2014; SAS, 2017, Yonce, Taylor, Kelly, & Gnau, 2017).

Information remains a topic that requires attention from researchers, with implication also on the practical, application side, as we need to increase the comprehension about its insertion in organizational systems, both as a concept to be determined, and a practical subject to be precisely assessed, additionally when we assess new waves of technologic events (Buckland, 1991; Castells, 2000; Tuomi, 2001; Barbosa, 2002; Yonce, Taylor, Kelly, & Gnau, 2017).

As it was assessed previously, the conceptual debate about information persists. It is important to perceive that it is a fundamental debate, an original conceptualization that is attempted, with various and significant results. A research basics, exposed to any interested analyst, is: if the basic concept is still so debated, is it possible to precisely understand its composition to other waves, trends and interrelated, systemic integration of information to organizational arrangements? To other systems? To immediate,

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