# Chapter 92
# Strategic Management of Data and Challenges for Organizations:
## Strategy Development and Business Value

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## ABSTRACT

*Public, organizational and personal data has never been so much in the forefront of discussion and attention as at the present time. The term 'Big Data' (BD) has become part of public discourse, in the press, broadcast media and on the web. Most people in the wider public have very little idea of what it is and what it means but anyone who gives it a thought will see it as contemporary and relevant to life as much as to business. This paper is directed towards the perspectives of people working in, managing and developing organizations which are dedicated to fulfilling their respective purposes. All organizations need to understand their strategic purpose and to develop strategies and tactical responses accordingly. The organizations' purpose and the frameworks and resources adopted are part of its quest for achievement which creates value and worth. BD is a potential and actual source of value.*

## BIG DATA: A NEW PUBLIC DISCOURSE

The young child's incessant question on a journey "are we nearly there yet?" is apposite when it comes to the usefulness of Big data for business. Big Data is certainly with us but how useful is it for the normal business practitioner and how does the hype live up to the reality? Have we the skills in IT and in the business to fully exploit it? Have the legal and privacy issues been fully addressed? Does it give strategic advantage or does it provide better management information? This paper will try to shed some light on these questions relevant to business. But there are two other significant dimensions: one is that of the

public and citizen at large, and the other of governments and public bodies who interpret the multitude of factors which impact the domain and who have to establish both a legal framework and manage the reality of social, personal, economic and organizational / business life.

Public, organizational and personal data has never been so much in the forefront of discussion and attention as at the present time: Chen, Mao and Liu (2104) provide a conspectus. The term 'Big Data' (BD) has become part of public discourse, in the press, broadcast media and on the web. Most people in the wider public have very little idea of what it is and what it means but anyone who gives it a thought will see it as contemporary and relevant to life as much as to business. This may be a basis for further understanding or even misunderstanding!

Other contributors to this volume are providing routes to greater understanding and have addressed matters of definition and of the development of the concept. This paper, as its title suggests, is directed towards the perspectives of people working in, managing and developing organizations which are dedicated to fulfilling their respective purposes. All organizations need to understand their strategic purpose and to develop strategies and tactical responses accordingly. The organizations' purpose and the frameworks and resources adopted are part of its quest for achievement which creates value and worth. In this paper we will assume that BD is a potential and actual source of value. If data is, as we believe it can be, a strategic asset, we will argue that it is also strategic. From this follows the need to address its strategic management and to explore and affirm how it can link together organizational work, strategy and process to create measureable value.

## DATA: A NEW INFORMING RESOURCE

At the root of typical definitions of data are the ideas of the power to define and inform as well as to represent reality in terms of identity and state. Additionally, data carries the idea of unity, definition and lack of ambiguity. Numerical data maximises these unitary properties with added advantage that they can be manipulated mathematically: we often call this 'hard data' / quantitative data. The concept and realization of data can also be used to represent levels of ambiguity and endowed with structure and durability through the use of tools such as coding, categorization, compression and abstraction. The term 'soft data/qualitative data is used to describe this data. Both types of data can be regarded as valid from a user perspective, but soft data often requires human intervention for its capture and this modifies or even potentially degrades it quality. This becomes more significant when sources of data are created and processed, and similarly may affect its interpretation and integrity.

Big data could easily be called 'wide data', or 'deep data'. One view is essentially that BD is a convenient way of naming the concept of linking one data set of one kind to one or more others of different kinds. It is a metaphor: the core quality is not its 'bigness' but its origin, informing quality and the properties required to manipulate and process it. And it is not only a matter of linkage, but also of ambition and concept. What can be linked to what? And, what needs to be linked to what? As a concept it can be regarded as a 'state of mind'. You have constructed the techniques to identify and link data sets, which then leads to the 'state of mind' as processing articulates the informing qualities revealed in the embedded content. The term Big Data then describes the end results of the process as it is revealed through the evidence it provides and comprehended. This definition subsumes the data itself and the processes that have created it: data is a gathered, stored (warehoused, processed, analysed (with specific

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