

# Chapter 5

## Strategic Information Governance Review: Exploring Data Management for Effective Business Op. Intelligence in a Data-Centric Environment

Tereza Raquel Merlo

 <https://orcid.org/0000-0002-2042-5415>

University of North Texas, USA

### ABSTRACT

*This book chapter, “Strategic Information Governance: Optimizing Business Operations, Business Intelligence, and Data Management,” explores the dynamic intersection of information governance and organizational functionality. Grounded in an exhaustive literature review, it guides businesses in enhancing operations, fortifying business intelligence, and refining data management. From principles to practical applications, the chapter emphasizes the symbiotic relationship between information governance and business operations. It provides actionable insights, empowering businesses to strategically leverage information governance for optimized processes. Addressing the evolving data landscape, it offers proven strategies for aligning governance with efficient data practices, ensuring compliance, security, and accessibility. This chapter is an indispensable resource for decision-makers, providing a comprehensive guide for organizations navigating the complexities of strategic information governance in today’s dynamic business environment.*

### INTRODUCTION

Businesses in all segments of society are relying heavily on data processing capabilities for decision making, product management, and pipeline growth. Unquestionably, data is recognized as a critical asset deployed by business intelligence in order to drive opportunities, leverage data assets, and ensure competitiveness. Computing languages, like Sequential Query Language (SQL), Data Mining and Warehousing, and data visualization tools that rely on a Cloud Computing (CC) based platform are ex-

DOI: 10.4018/979-8-3693-0472-3.ch005

amples of how information technology is moving from an on-premises based platform to a cloud-based platform as a response to the need for flexibility, reliability, and security in a data management strategy. In such a competitive, globalized, and powerfully technological corporate environment, the importance of effective data management and knowledge production are essential for the promotion of innovation, operations improvement, and problem-solving.

The generation and acceleration of data analytics frameworks as guiding principles for managers can enable capabilities and optimize client relations and business transformations. Successful data analytics and management is proven to reduce costs, expand product lines, improve teamwork dynamics, and ultimately increase revenue. These aspects cannot be ignored in a society driven by data, big data, and oriented by business intelligence approaches. It can be argued that data governance is a new term -or revised term- with a perspective and implications for data as an asset.

Davenport and Harris (2007) described how some companies gained a sustainable competitive advantage through analytics, defending that companies gain a new dimension and enhance opportunities through insights that resulted from data analytics and superior data management strategies. Organizational interest in big data and knowledge management has been growing, and significant business and process improvements are linked to the organization's ability to manage intangible and tangible resources, which is reflected in economic gain. The efficient adoption, implementation, and utilization of knowledge assets all impact the speed and quality of decision-making processes and complex data analytics for performance evaluations within a business.

The recognizable increase in the complexity of issues related to big data has been prompting a series of ethical, legal, regulatory, and behavioral challenges regarding big data management and governance (Ballard et al., 2014). For instance, Das (2015) elaborates on the "single point of access to the tacit and explicit knowledge that supports members of the institution or organizations in all access of their learning," (p.26) and drew focus on the following aspects when determining governance ideals: marketing, sales, distribution, support, and finance. All of these must be considered in determining the best strategy for approaching business decisions based on customer lifestyle and customer interaction.

Data governance is a collection of processes, roles, policies, standards, and metrics that ensure the effective and efficient use of information in enabling an organization to achieve its goals. Data governance defines user accessibility (who can take what action, upon what data, in what situations) and problem-solving (using what methodological approach). The increase in recognition of the significance of data governance for businesses and the economy, including advancements in data management (Big Data, Artificial Intelligence (AI), Cloud Computing, Data Analytics and Visualization Tools) have resulted in an exceptional demand for information access and sharing and knowledge production. This phenomenon triggers discussions about the effectiveness of layers of information privacy, information quality, information and data analytics strategies and tools, information access and sharing, and knowledge production, all of which ultimately define innovation and competitiveness in organizations and society in general.

In light of the aforementioned challenges there are limitless possibilities within the realm of data management that surpass data governance roadmaps and involve complex solutions in business intelligence strategies. Hence, in today's data-centric knowledge economy businesses need frameworks and governance roadmaps to effectively leverage data to guide their biggest decisions. This article is organized as follows: First, an introduction to the current discourse on data, data management, data governance and the motivation for this paper is presented; In the next section, first the key elements of the different perspectives on the business data governance roadmap are laid out. Then, a general criterion for a conceptual Data Governance Roadmap for Business Intelligence: The Assess, Track, Design, Implement

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/strategic-information-governance-review/345420](http://www.igi-global.com/chapter/strategic-information-governance-review/345420)

## Related Content

---

### Goals and Requirements for Supporting Controlled Flexibility in Software Processes

Ricardo Martinho, Dulce Domingos and João Varajão (2010). *Information Resources Management Journal* (pp. 11-26).

[www.irma-international.org/article/goals-requirements-supporting-controlled-flexibility/43718](http://www.irma-international.org/article/goals-requirements-supporting-controlled-flexibility/43718)

### Developing a Basis for Global Reciprocity: Negotiating Between the Many Standards for Project Management

Lynn Crawford and Julien Pollack (2009). *Selected Readings on Information Technology Management: Contemporary Issues* (pp. 307-322).

[www.irma-international.org/chapter/developing-basis-global-reciprocity/28675](http://www.irma-international.org/chapter/developing-basis-global-reciprocity/28675)

### A Method to Quantify Corpus Similarity and its Application to Quantifying the Degree of Literality in a Document

Etienne Denoual (2008). *Information Communication Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 751-763).

[www.irma-international.org/chapter/method-quantify-corpus-similarity-its/22698](http://www.irma-international.org/chapter/method-quantify-corpus-similarity-its/22698)

### Architecture Methods and Frameworks Overview

Tony C. Shan and Winnie W. Hua (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 218-225).

[www.irma-international.org/chapter/architecture-methods-frameworks-overview/13576](http://www.irma-international.org/chapter/architecture-methods-frameworks-overview/13576)

### Using Organizational Semiotics and Conceptual Graphs in a Two-Step Method for Knowledge Management Process Improvement Measurement

Jeffrey A. Schiffel (2010). *Information Resources Management: Concepts, Methodologies, Tools and Applications* (pp. 427-442).

[www.irma-international.org/chapter/using-organizational-semiotics-conceptual-graphs/54493](http://www.irma-international.org/chapter/using-organizational-semiotics-conceptual-graphs/54493)