

On the Radar



Data Governance – Is it on Your Board’s Radar?

BY MICHAEL GIRARD

Organizations and their boards are facing an exponentially increasing amount of financial and non-financial data. Business is facing a data revolution and if organizations wish to be a part of the innovation economy, they will need to collect and use vast amounts of data to be competitive. When properly handled, data has immense value. Some believe data has the potential to displace oil as the most lucrative global commodity. But unlike oil, data is not a finite resource. Organizations, from micro-sized businesses to multinational corporations continually generate and collect data in their daily operations.

Some key statistics to amplify the significance of the role of data in business include:¹

- Internet users generate about 2.5 quintillion bytes of data each day, with the number of internet users continuing to grow exponentially
- The big data analytics market is set to reach \$103 billion in 2023
- 95% of businesses cite the need to manage unstructured data as a problem for their business
- Poor data quality costs the U.S. economy up to \$3.1 trillion yearly

Key sources of data include:

- Traditional data in the form of financial data (e.g., sales and expenses); operational data (e.g., logistics and purchasing); databases; and multiple reports generated across the organization
- New sources of data, such as customer web clicks; digital objects; web traffic on social media accounts, Internet of Things devices and sensors data; and GPS tracking of employees, vehicles, packages, etc.

¹ [25+ Big Data Statistics - How Big It Actually Is in 2020?](#)

The value and uses of data

In today's economy, data is not only a commodity, but an asset that holds the key to unlocking powerful insight-driven decisions. As data is a new economic resource for creating and capturing value, control over data is strategically important to be able to transform it into digital intelligence.

In virtually every value chain, the ability to collect, store, analyze and transform data brings power and competitive advantages.

As a result, data is redefining the traditional concept of value chains. A new model called a data management value chain has emerged. Data management value chains are different from traditional value chains, which typically produce products or services, in that data value chains are about creating outcomes. Through the data value chain, the ability to collect, store, analyze and transform data delivers outcomes that offer organizations power and competitive advantage.²

Examples of high-value, data-driven insights exist in virtually all sectors.

- In healthcare, the outcome of the data value chain can be to help detect preventable diseases in their early stages.
- In the banking sector, data is used to recognize illegal activities such as money laundering.
- In meteorology, it helps with the study of global warming.

In business the uses are innumerable. Using big data, Netflix saves \$1 billion per year on customer retention alone.

The challenge of data regulation

But the data revolution is not without its challenges. Regulatory standards have not kept pace with this valuable new asset. A weak legal and regulatory environment can affect everything from our global transition to a digital economy to the profitability and sustainability of individual businesses.³

In response to regulatory challenges, in Canada, Bill C11 – The Digital Charter Implementation Act of 2020⁴ – has been tabled in Parliament, to ensure Canadian privacy laws are aligned with the 21st century digital economy. The proposed Act strengthens personal privacy, grants new powers (including issuing orders) to the Privacy Commissioner, and establishes substantial fines for infractions of the Act. The Act would replace Canada's existing Personal

2 [Digital Economy Report 2019, Value Creation and Capture: Implications for Developing Countries](#), United Nations, Geneva, 2019.

3 The Professional Accountant's Role in Data: Draft Discussion Paper, Joint Publication, Chartered Professional Accountants of Canada and International Federation of Accountants, expected release date March 2021.

4 [Fact Sheet: Digital Charter Implementation Act](#), 2020.

Information Protection and Electronic Documents Act (PIPEDA) with the new Consumer Privacy Protection Act (CPPA) and the new Personal Information and Data Protection Tribunal Act.

The CPPA provides clear rules for businesses to follow as they innovate. It is intended to provide transparency and control to Canadians regarding how their information is being handled by organizations. It would give consumers the right to access their personal information being held by an organization, find out how it is being used and request to have it deleted. Organizations will be required to satisfy those requests.

Violations of these standards would be investigated by the federal Privacy Commissioner and could result in the Privacy Commissioner ordering a company to stop collecting or using personal information.

The board's role in data governance

Clearly boards are functioning in a world that is data-rich, data-intense and data driven. This will require directors to have a sufficient level of knowledge to seek opportunities but also to actively oversee associated data risks in a rapidly evolving environment.

Boards play an important role in the transition to an integrated business strategy that is driven by digital. The business strategy needs to define the company's overall approach, not just towards digital, but to where and how the business should operate to maximize value creation. To excel in this evolving business environment, boards require adequate knowledge to critically examine complex issues. While boards are not responsible for the implementation of an organization's digital transformation, they are responsible for assessing the digital strategy and how emerging technologies are being integrated into that strategy.

The focus for the board should be to ensure that policies and procedures are in place to confirm that data governance issues are managed properly across the organization. The following questions are proposed for boards to ask management and themselves to assess how to successfully transition to a data-based environment.

Questions for boards to ask

1. Does management know where data is coming from?
Data can be collected in existing datasets, generated through the deployment of new technologies or acquired from third parties. Management needs to be aware of and assess the risks associated with the use of data from third parties.
2. Has management identified accountabilities for data?
Management should identify who is in charge of creating and maintaining data value chains in the organization. Ideally, data value chain functions should be centralized in one unit until all divisions have been trained on the development and use of artificial intelligence and machine learning tools.

3. Do we know if we are compliant with privacy laws and regulations?
Procedures to monitor and report on compliance to privacy laws and regulations should be in place.
4. Do we know if datasets and algorithms deployed in the organization meet acceptable ethical standards?
5. Do we know what we do with data?
Management should identify ownership and control of data that will be subject to secondary use. Datasets should be easily retrieved, collated and labelled in order to facilitate secondary data use.
6. Do we know where data resides?
There needs to be clarity regarding the use of cloud-based services to store datasets for secondary uses. For example, many public sector organizations in Canada are required to ensure that cloud-based servers are located within Canada. Storing data in other jurisdictions may result in different privacy regimes applying to personal data.

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