

# Chapter 12

## Social Media Data Into Performance Measurement Systems: Methodologies, Opportunities, and Risks

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### ABSTRACT

*Social media data are spreading widely across the world with a number of public institutions now active on social media. Much attention is being paid to how public institutions can exploit social media, for example, to provide better public services or engage with the general public. Little is, however, known about the potential offered by the data generated through social media, in particular, the possibility of applying social media data formally within a performance measurement system (PMS). The aim of this chapter is to explore how social media data can be integrated into a PMS for a public institution, proposing in this respect a framework of analysis. This framework places the decision-maker at the centre of the cycle and it consists of three main phases: the collection of social media data, the computation of indicators, and the visualization of data.*

## **INTRODUCTION**

Over the past few years, Performance Measurement Systems (PMSs) used within public administrative bodies have been at the centre of academic and practitioner debates, with the publication of several contributions on how to design, implement and use a PMS to support public institutions in managing, controlling and reporting on their work (Arnaboldi, Lapsley, Steccolini, 2015).

The data that allow the system to work are a core component of a PMS. Financial and non-financial data have traditionally acted as the main sources for the system, enabling financial and non-financial indicators to be elaborated. Typically, these data are highly reliable (since data are certified and sometimes audited) updated less frequently and involve lower volumes. Traditional financial and non-financial data are not immune to problems such as “excessively long publication delays, insufficient coverage of topics of interest, and the top-down process of data creation” (Severo et al., 2016, p. 354).

Latterly, a further type of data has emerged, social media data, fuelling debate on their potential and opportunities. Social media, broadly defined as online platforms based on two-way interaction (Kaplan and Haenlein, 2010), have spread extremely rapidly in recent years, with people posting all the time about anything from anywhere, contributing to the mass generation of social media data.

Two characteristics distinguish social media data from traditional organizational data: social media data are provided by the users, rather than the organization, and in real time, rather than when the organization deems it appropriate. Volumes are consequently higher, more frequent and data must be extracted from social platforms, since they are not readily available within the organization.

Social media data provide a real opportunity for organizations to improve their accountability practices. In this continuous evolving landscape, we have some degree of knowledge on how public authorities use social media. For example, it is widely recognized that public authorities endorse social media for a broad spectrum of purposes that range from citizen involvement and participatory budgeting, to improving the delivery of public services, fraud detection and transparency (Bonsón et al., 2012; Janssen and van den Hoven, 2015). Little, however, is known in terms of how social media data can be used to set in place a PMS, with the final end of enabling public sector accountability internally and externally.

The aim of this chapter is to provide a framework for integrating social media data into a PMS, which is achieved by identifying the main phases of analysis, as well as determining the risks and opportunities within each phase. In view of this, three main questions will be addressed:

- What are the main steps, and associated risks, for extracting and downloading data from social media platforms? This question is connected with the problem of data collection: not all social media platforms allow their data to be freely extracted and, at the same time, the type of data downloaded can vary depending on the search formulae employed.
- How to make sense of social media data? This question is connected to the appropriate Key Performance Indicators (KPIs) that must be identified in order to transform social media conversations into usable information.
- How can social media data be reported? This concerns the problem of bringing social media analysis into the sphere of non-experts.

Methodologically, the proposed framework is the outcome of six years during which the authors were engaged in social media projects alongside a number of public sector bodies and institutions, including municipalities, public museums, theatres and institutions of higher education.

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