# INTRODUCTION

This Special Issue on Big Data and Organization Design addresses the challenge of big data for the design of organizations. Big data refers to the availability to organizations of massive amounts of heterogeneous and continuously updated information. Practitioners agree that the availability of such information creates challenges and opportunities for organizations that have never been seen before. The articles presented here take up this challenge and discuss avenues for future research and practice on organization design in the era of big data.

The genesis of the special issue stems from papers presented at the World Summit on Big Data and Organization Design, which was held at the Université Panthéon-Sorbonne (Paris) on May 16-17, 2013. Initiated by the Organizational Design Community (ODC) and co-sponsored by IBM, the Interdisciplinary Center for Organizational Architecture (ICOA) at Aarhus University (Denmark), and the Université Panthéon-Sorbonne, the conference featured 11 keynote and distinguished speakers and included 130 participants from 26 countries. The speakers and participants represented academia, business, and government. Seventy-four papers co-authored by the 130 participants were accepted by the Organizing Committee. The articles in this special issue offer a selection of the issues and opportunities posed by big data and their implications for organizations.

The special issue begins with three research articles. Galbraith builds on his earlier ideas on big data and organization design (*Journal of Organization Design*, Vol. 1, Issue 2) to discuss shifts in the internal distribution of power likely to be brought on by a strategic emphasis on big data. He also discusses how seizing the opportunity of big data implies increasing the speed of decision making within the organization, enabling the creation of entirely new businesses. Berner, Graupner, and Maedche develop the provocative proposition that big data requires a transformation from command and control hierarchies to post-bureaucratic organizational structures and processes wherein employees at all levels are empowered while simultaneously being controlled. Grossman and Siegel address the issue of how analytics capability is distributed within an organization, stressing the importance of building a critical mass of analytics staff, centralizing or distributing the analytics staff to support critical big data processes, and establishing an analytics governance structure to ensure that critical analytics processes are supported by the organization as a whole.

Next, two point of view articles discuss the implications of big data for higher education and for organizational structure. Miller argues that realizing the potential of big data requires a new mind-set that is not yet reflected in the academic curricula of universities scrambling to develop degree programs in data science. Korhonen speculates about how a strategic emphasis on big data will be manifested in an organization's structure. Noting that historically strategy and structure co-evolve, he predicts the shape of an organization that embraces the big data phenomenon.

Finally, the case study article by Gabel and Tokarski discusses how big data is affecting their own organization. Their account of RTI International, a non-profit survey research firm, shows how an organization with plenty of quantitative analysis talent and expertise nevertheless needs to engage in a major transformation in order to deal successfully with big data issues.

We, the special issue editors, wish to thank the authors for their contributions, the reviewers for their advice, and the editors of *Journal of Organization Design* for publishing these interesting and valuable articles. We hope the special issue sparks research and debate on the topic of big data and organization design.

**Richard M. Burton**
**Dolly Mastrangelo**
**Fabrizio Salvador**