



# Big data research for politics: human centric big data research for policy making, politics, governance and democracy

Anna Visvizi<sup>1,2</sup> · Miltiadis D. Lytras<sup>3,4</sup> · Naif Aljohani<sup>4</sup>

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Big data research and big data analytics offer a new way of examining and interpreting issues and processes shaping the development of contemporary societies, including politics, economics and, increasingly, communication among the variety of stakeholders that are involved in social interaction domestically and beyond state borders (Visvizi and Lytras 2019; Lytras et al. 2018; Sicilia and Visvizi 2019).

Advances in information and communications technology (ICT) long have been altering the dynamics of social interaction and societal processes, probably ever since telephone and telegraph have been introduced to popular use. The introduction of ever more sophisticated ICT, ICT based services and data collection methods brought our societies to a new stage of development with apparently abundant opportunities and ways of employing ICT (Lytras et al. 2021; Alkmanash et al. 2019).

It has been nevertheless only with the onset of the big data paradigm, incl. big data research and big data analytics, that we began acquiring the ability to make sense of the data, services, technologies and resultant opportunities and their value added for our societies (Lytras et al. 2019; Visvizi et al. 2020b). As challenges to political stability, democracy, growth and development multiply, accountability and legitimacy of governments and international organizations are being questioned (Visvizi and Lytras 2020), and

our societies are plagued with fake news and attempts at manipulation (Visvizi et al. 2020a), it is imperative to query the promise and the value added inherent in the big data paradigm.

## 1 Objective

The objective of this Special Issue was to shed light on and explore the connection between big data and big data analytics for policy-making, politics, quality of governance and democracy. The agenda in this debate includes the following issues.

- The role of ICT in shaping diverse layers of politics in its local, regional, and global outreach.
- Digitization in contemporary policy making process,
- Big Data & questions of securing and promoting transparency and accountability.
- Open data, Data Analytics and data mining for data-driven decision process
- Big Data & Big Data Analytics and the optimization of public administration performance
- Big Data & Big Data Analytics and the relationship between the public and the private
- sector
- Big Data & Big Data Analytics and privacy
- Big Data & Big Data Analytics and questions of civic responsibility
- Big Data & Data Analytics and safety and security considerations at national, regional, international levels
- Big Data & Data Analytics and international organizations
- Big Data & Data Analytics and blockchains
- Big Data & Data Analytics and questions of ontologies and semantics
- Big Data & Data Analytics be vis-à-vis fake news and propaganda.

✉ Anna Visvizi  
avisvizi@gmail.com

Miltiadis D. Lytras  
mlytras@acg.edu

Naif Aljohani  
nraljohani@kau.edu.sa

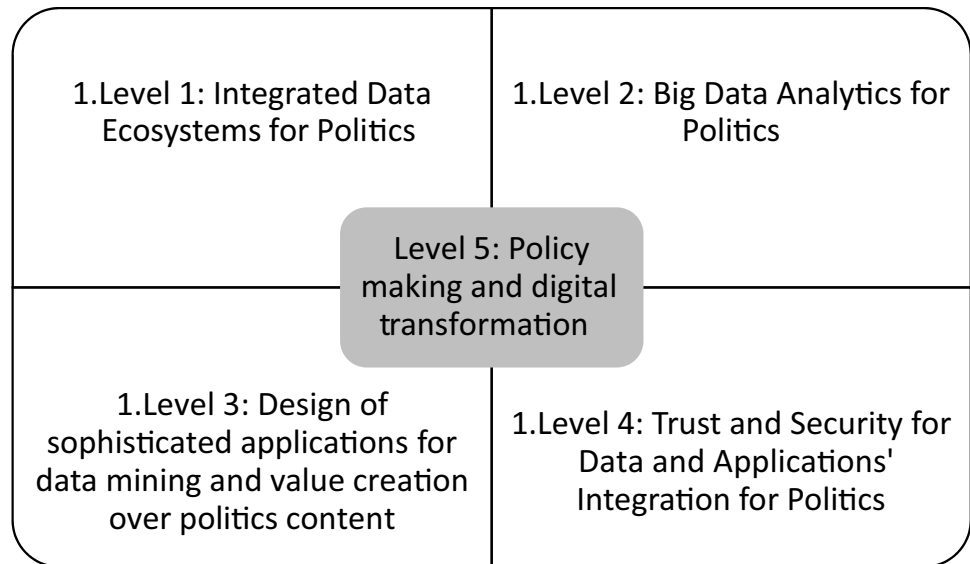
<sup>1</sup> Effat College of Business, Effat University, Jeddah, Saudi Arabia

<sup>2</sup> SGH Warsaw School of Economics, Warsaw, Poland

<sup>3</sup> Effat College of Engineering, Effat University, Jeddah, Saudi Arabia

<sup>4</sup> King Abdulaziz University, Jeddah 21589, Saudi Arabia

**Fig. 1** A high level abstraction for Big Data for Politics Research and Digital Transformation/ Source: The authors



- Ethical questions in Big Data research and data analytics
- Big Data Analytics and opinion mining
- Data mining and data analytics: tools, applications, coverage (spatial, temporal), cases,
- Examples
- Applying data analytics: the cases of the EU, NATO, national governments, the media sector, other industries (Fig. 1)

A variety of innovative topics are included in the agenda of the published papers in this special issue including topics such as:

- Leveraging Big Data for Politics: Predicting General Election of Pakistan using a Novel Rigged Model
- Exploring Deep Neural Networks for Rumor Detection
- Density-Based Reverse Nearest Neighborhood Search in Spatial Databases
- Sensing the disturbed rhythm of city mobility with chaotic measures: Anomaly awareness from traffic flows
- The influence of external political events on social networks: the case of the Brexit Twitter Network
- Novel Findings of Hidden Relationships in Offshore Tax-sheltered Firms: A Semantically Enriched Decision Support System
- Linked Data and Semantic Web Technologies to model context information for policy making.

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