Chapter 7
Governing by Humans, Not by Robots:
Regulating Humans and Artificial Intelligence in the 21st Century

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ABSTRACT

Artificial intelligence and robots together with fake news have challenged irrevocably not only the traditional business organizations and representative democracy but also the role of regulatory mechanisms in digital capitalism. In 2020, companies will need to develop a new culture (i.e., the business intelligence culture[BIC]) in order to understand that human resources, currently one of the lowest rungs in a company ladder, will be elevated to the same position as research and development. This chapter examines and analyses artificial intelligence, robots, and human decision-making process together with the role of automatic decision-making algorithms in business systems. It considers critical questions regarding global regulation, ethical standards, public interest, and democracy. It examines the need for regulation in digital capitalism. Finally, it outlines the models business intelligence culture (BIC) and collective will democracy (CWD) as methodological tools to analyze humans and robots' governance in the digital era.

INTRODUCTION: HUMANS, ROBOTS AND ARTIFICIAL INTELLIGENCE IN 21ST CENTURY

In the second decade of the twenty first century humanity wakes up to the artificial intelligence robots' ecosystem, so confused by automatic decision-making algorithms, trying to understand its role in the digital era. The advance of robots over the past two decades has opened new opportunities and offers the potential for digitalizing human activities in our democratic and business ecosystems.

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The AI robots together with big data and quantum computers create a new information and communication paradigm i.e. the *'Info-communication Paradigm'* by bringing together business start-ups, NASA, the Big Tech companies, research institutions, business organisations, governments and new markets in the digital capitalism. The *'Info-communication Paradigm'* emerges as a result to the 4th and 5th generation mobile phones, broadband connections, wireless applications, cyberwars, AI weapons, e-commerce, e-marketing, e-democracy, e-learning, Internet of Things (IoT), big data, artificial intelligence software, robots and quantum computers (see D. W. Cearley D. W. 2020, J. Maguire & B. R. Winthereik, 2019; J. Anderson, L. Rainie, & A. Luchsinger, 2018; The Economist, 2018; R. Youngs, 2019; Brownsword, R. 2004).

Artificial intelligence (AI) and robots together with fake news have challenged irrevocably not only the representative democracy, business systems and free market economy but also the role of global regulatory mechanisms and human decision-making processes in our societies. Within this context, Google and NASA are developing research labs i.e. Quantum Artificial Intelligence Lab and research projects to explore using our computer for AI applications and to investigate a set of learning problems in the info-communication globalization.

This chapter examines and analyses artificial intelligence, robots and human decision-making process together with the role of automatic decision-making algorithms in our business systems. It considers critical questions regarding global regulation, ethical standards, public interest and democracy. It examines the need for regulation in the digital capitalism. It analyses the *'Info-communication Paradigm'* and the *'Augmented Intelligence Democracy' (A.I.D)* model. Finally, it outlines the model *'Business Intelligence Culture' (B.I.C)* and *'Collective Will Democracy' (C.W.D)* together with the global regulatory model *'Dynamic Process and Product Regulation' (D.P.P.R)* as methodological tools to analyse humans and robots' governance in the digital era.

ROBOTS AND ETHICAL STANDARDS: GLOBAL CONTROL, HUMAN RESISTANCE

Artificial intelligence and robots exert strong pressure on traditional regulatory systems and humans decision-making process. In the context of the recent crisis of democracy, some of the most important and widely debated issues in the areas of digitalization of humans' activities are the protection of human rights, democratic systems, privacy, transparency, trust and accountability. In order to cope with the digitization transformation and to protect ethical standards and cultural rights, all countries should collaborate to develop regulatory mechanisms to control robots and automatic decision-making algorithms both locally and globally. For this purpose, the use of artificial hardware and software programmers, together with regulatory experts and policy making managers may prove extremely valuable (see also, Gantzias, 2020; D. P. Baron, September 2010; A. Ferrari, 2008; M. Bovens 2007; R. Brownsword, ed., 2004b; J. Black, 2002; J. Black, P. Muchlinski & P. Walker. Eds. 1998).

Nowadays our democratic system faces the necessity of achieving democratic changes by developing new legislation regarding artificial intelligence robots and human decision-making process. Ethical standards and new governing models regarding the role of humans and robots constitute prominent critical issues in the info-communication globalisation. Robots are programmable machines that can assist human workers with a wide array of tasks, including lifting, medical diagnosis, etc. The autonomy of the robots - turn itself on or recharge itself - raises many concerns about accountability, regulations and legisla-