Chapter 3
Strategic Digital Informing and Its Challenges in the 21st Century

ABSTRACT

This chapter examines the challenges faced by digital informing technologies and civilization in the 21st century. The chapter begins by analyzing (1) the stages of development of strategic information technologies from the early 20th century up to the present as well as (2) the strategies adopted by informing science specializations (such as cognitive science, software engineering, etc.). Next, the chapter surveys major innovations in the history of strategic information technologies. This is followed by an analysis and evaluation of the concept of a laborless economy. The chapter concludes by positing a set of rules for workers in the digital economy that will ensure the wise development of civilization.

INTRODUCTION

Modern informing technologies have created challenges that have not been encountered in the history of human development regarding the scale of the problems they have created as well as the interruptions they have caused to the ways people and organizations operate. The developments of modern informing technologies have also occurred in a relatively short period of time. The Agricultural Wave, for example, has been going on for several millennia, and the Industrialization Wave has been going on for 200 years. Furthermore, its impact on civilization has been, overall, positive since it improves productivity and creates better living conditions. By contrast, the current Waves—the Information, Globalization, Virtualization, Bio-Material, and Artificial Intelligence Waves—have approximately occurred in the last 25 years (1995-2020) [1], and the latter of the bunch have an even shorter history. Despite such a short duration, the technological systems involved in computerization, robotization, and automation threaten people with structural unemployment and war carried out via intelligent robots who are able to succeed thanks to the help of shortsighted hackers and global businessmen who own robot "populations". However, their lives also hang in the balance, as evidenced by the social riots in the United States in 2020.

This threat to civilization and technological systems will be strategically examined in this chapter, and remedies and an assessment of their feasibility will be proposed. This analysis can be contrasted with the picture of a highly intelligent civilization designed by deceptive ICT enthusiasts and naïve business people who aim to gain power over the world, like the SuperMind[2] Ernst Stavro Blofeld in James Bond, whose only friend was a white cat basking on his lap (Figure 1).

Figure 1. SuperMind Ernst Stavro Blofeld (played by Donald Pleasence) in the James Bond film You Only Live Twice (1967) (Photo: Wikipedia)

THE CONCEPT OF STRATEGIC DIGITAL INFORMING

In the 21st century, the science of informing technology is in a state that science fiction imagined in the 1960s and 1970s. Now self-driving vehicles and self-thinking robots have begun to appear. In the face of almighty and ubiquitous computerization, have humans become unnecessary? This may sound like science fiction, but the 2020 pandemic has helped in increasing the power of digitalization. The Internet has made physical visits to places such as banks, post offices, and cinemas mostly unnecessary, and the stay-at-home orders have caused a tendency to stay there permanently.

As our physical worlds shrink to avoid Covid-19 contact, our virtual platforms attempt to make up for it. In the foreseeable future, many of us, sitting at home and waiting for the vaccine, will attend virtual schools, pray in virtual churches, and socialize at virtual events. Furthermore, the history of the Internet

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