CURRENT EVOLUTIONS AND IMPACT OF DIGITAL TECHNOLOGIES

CLAUDIA IONESCU¹, VASILE DUMITRAȘ²

Abstract. Various observers describe today's global economy as one in transition to a knowledge economy, as an extension of an information society. The transition requires that the rules and practices that determined success in the industrial economy need rewriting in an interconnected, globalized economy where knowledge resources such as know-how and expertise are as critical as other economic resources. According to analysts of the knowledge economy, these rules need to be rewritten at the levels of firms and industries in terms of knowledge management and at the level of public policy as knowledge policy or knowledge-related policy. The digital and ICT revolutions are twin revolutions. Information and communications technology (ICT) refers to a broad field encompassing computers, communications equipment and the services associated with them. It includes the telephone, cellular networks, satellite communication, broadcasting media and other forms of communication.

Keywords: knowledge, economy, digital, society, revolution

1. Introduction

One of the many challenges facing the countries today is preparing their societies and governments for globalization and the information and communication revolution. Policy-makers, business executives, academics, and ordinary citizens are increasingly concerned with the need to make their societies competitive in the emergent information economy. Technological breakthroughs have revolutionized communications and the spread of information. By the 1940s television was broadcasting both sound and visuals to a vast public. In 1943, the world's first electronic computer was created. However, it was only with the invention of the microprocessor in the 1970s that computers became accessible to the public. In the 1990s, the Internet migrated from universities and research institutions to corporate headquarters and homes. All of these technologies deal with information storage and transmission. However, the one characteristic of computer technology that sets it apart from earlier analog technologies is that it is digital. Analog technologies incorporate a combination of light and sound waves to get messages across, while digital technology, with its system of discontinuous data or events, creates a universal model to represent information that is expressed by almost anything using light and sound waves.

73

¹ Academia de Studii Economice, București

² Universitatea "Valahia" Târgoviște