Book Introduction

Information Technology Economy Society

How our life is changing at home, school, work and in cities?

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The book is divided into twelve main chapters and the effects of Information Technologies on life at home, school, workplace and in cities are examined. In general, the book is tried to answer the questions listed on the back cover of the book.

Chapter-I: The concept of technology is explained and the concepts of discovery, invention, innovation and diffusion related to technology production are introduced. Then, the transition from Industry 1.0 to Industry 4.0 is explained and Industry 4.0 is introduced in details. The importance of digital technological transformation as well as the technology policies of the countries are explained and recommendations are given.

Chapter-II: Information Technology (IT) concepts have been introduced.IT's basic concepts, effects, values, importance and new opportunities are mentioned. Then the reasons why ITs change social and personal life are examined. At the end of the chapter, how to make IT choices is explained.

Chapter-III: IT hardware is introduced. For this purpose, firstly, the computer has been examined physically and conceptually in all aspects. Parts of computer hardware and software are introduced. The network, ADSL, VoIP, 3D printers and wireless and mobile technologies developed around computer hardware have been examined separately.

Chapter-IV: IT software is introduced. For this purpose, firstly, all software types of the computer are examined. Databases, Open software, Linux Operating system, Pardus operating system, Viruses and Cloud Computing related to computer software have been examined separately.

Chapter-V: Systems related to internet technologies are explained. For this purpose, internet related terms, concepts, history and importance are explained. Web sites are mentioned and new e-Government and e-Commerce applications which are developing on the internet are explained. In the last part, what needs to be done to develop the internet is explained and the strategies that can be developed are listed.

Chapter-VI: How ITs are changing life at home was explained. In this section, home automation systems, multimedia computers, MP3 and MP4 players, DVDs, mobile phones and video cameras and their effects are discussed.

Chapter-VII: The effects of ITs on work life were examined. Information Systems (BS) used in the organizations have been subjected to a new classification according to their functions instead of classical management levels. For this purpose, BSs are divided into five categories as Operational, Management Support, Data Analysis, Artificial Intelligence and Corporate Information Systems. Then each classification is explained in shortly.

Chapter-VIII: The effects of ITs on the teaching system were examined. For this purpose, the concepts of education, training and learning are introduced in terms of IT. Then, IT Assisted Instruction (ITAI) and IT Managed Instruction (ITMI) systems were examined. Virtual or online teaching developed with the help of internet is explained. Finally, EBA and FATIH projects were introduced. **Chapter-IX:** The effects of ITs on urban life were explained. For this purpose, urban developments in the world with the effect of ITs, features of smart cities and developments in management have been mentioned. IT applications in urban management such as City Information System, e-Municipality, Wireless Municipal Internet Network (WMIN), Urban Security System and Geographic Information Systems and their characteristics were examined.

Chapter-X: The Information Society and Informatics class were explained. In the information society, issues such as law and copyrights, computer ergonomics and digital inequality have been discussed. Then, it has been mentioned about the things to be done in order to move to Information society.

Chapter-XI: Information Economy and its main sectors are examined. Five basic features of information economy are explained. The concepts of employment and unemployment in information economies have been examined in the context of the new Industry 4.0. In the last section, the steps to be taken to move to Information Economy and Society are summarized and listed.

Chapter-XII: The last 100 years of technological development is examined and then technological developments in the world compared to Turkey is explained. In line with the technological changes in the World, what needs to be done in terms of technological policies has been analyzed and suggestions have been presented.