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Applications of Information and Communication Technology in Various Fields

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Information and communication technologies include the methods and steps used in communicating and distributing information, and performing calculations using all electronic devices designed for this purpose, such as computers and various means of communication within established scientific rules and regulations [1].

Information and communications technology (ICT) can also be defined as: all the technologies used to handle broadcasting media, telecommunications, intelligent building management systems, network-based control and monitoring functions, audiovisual processing and transmission systems and others [1].

ICT was also recently used to express the use of communication lines, to transfer various types and formats of data. Audio and video networks and computer networks are combined through a common cable system, that provides the Internet, telephone, and television services to homes and companies through a single optical cable, which contributes to a significant reduction in costs [1].

Information and communication technologies have greatly affected human life. Since the industrial revolution, man has begun to develop machines and equipment that facilitate his work [2].

After the entry of technology into the world of business, agreements and transactions have been established from anywhere in the world and very quickly. [2].

Information and communications technology is used in various fields such as e-commerce, banking, agriculture, education, medicine, defense, transport, etc. [3]. With technological advances, advanced computing infrastructure, sophisticated marketing strategies, and reduced cycle times with robotic process automation (RPA), ICT is playing a vital role [3].

ICT has had a particular impact on the development of medicine. Medical devices and modern equipment have evolved considerably thanks to information and communications technology. ICTs are related to the devices, resources and tools needed to improve the acquisition, retrieval, storage and use of information in health and biomedicine. That is why we find that most of the medical devices that now exist rely on information and communication technology in the way of use, detection and treatment of diseases [3]. Information and communication technologies are used every day by financial companies to trade financial instruments, to report a business's earnings, and to keep records of personal budgets. ICT allows rapid calculation of financial data and provides financial services companies with strategic and innovative benefits as well as electronic transfer of money, through the use of credit cards, or e-commerce, which includes the purchase and payment via the Internet and others. [3].

Information and communication technologies contribute greatly to education because they provide better educational environment through the use of computers, tablets, data displays, interactive electronic boards, and other means in the process of communicating information to students [3].

Information and communication technology in agriculture helps in the growing demand for new approaches

and focuses on enhancing agricultural and rural development through better information and communication processes [3].

ICT also helps empower rural people by providing better farming techniques, better access to natural resources, and effective production strategies, etc. [3]. The use of information and communications technology is very important for businesses to establish a hassle-free and secure communication flow and to meet daily operational tasks. ICT tools help companies analyze, store, process and share vast amounts of data and make better use of products and resources. ICT tools also help improve profitability, reduce costs compared to manual tasks and minimize lead times [3].

ICT systems allow managers and employees to make decisions quickly and accurately so that they can effectively manage the operations process and day-to-day activities and rapidly predict business opportunities or threats. Thus, ICT has a great impact on our lives.

References:

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