PROSPECTS AND PROBLEMS OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTS) IN MAKING HEALTHY INFORMATION SOCIETY --A REVIEW

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Concept of Information technology(IT) &Information and Communication Technologies (ICTs) :

"**Information technology (IT)** is "the study, design, development, implementation, support or management of computer-based information systems, particularly software applications, computer hardware and mobile devices."IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit, and securely retrieve information. Many companies now have IT departments for managing the computers, networks, and other technical areas of their business. IT is considered a subset of information and communications technology(ICT). but it also encompasses other information distribution technologies such as television and telephones. Several industries are associated with information technology, including computer, hardware, software, electronics, semiconductors, internet, telecom equipment, engineering, healthcare, e-commerce, and computer services.

Information and communications technology (ICT) is an extended term for information technology (IT), which stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information. The term *ICT* is also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system. However, ICT as "the concepts, methods and applications involved in ICT are constantly evolving on an almost daily basis." The broadness of ICT covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form, e.g. personal computers, digital television, email, robots.

NEED OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT):
1.Information and Communications Technology (ICT) has an important role in the world With ICT, the company can make the business easier to happen with the client, supplier and the distributor.

2. ICT is one of the economic development pillars to gain national competitive advantage. It can improve the quality of human life because it can be used as a learning and education media, the mass communication media in that are built with them.

3. ICT has an impact on nearly every aspect of our lives – The digital age has transformed the way young people communicate, network, seek help, access information and learn.

4. It is in this premise that educational technology and e- learning is taught in or out of the classroom since educational technology is used by learners and educators in homes, schools, businesses, and other settings.

5.With improvements in information technology, globalization has increased. The world is brought closer, and the world's economy is quickly becoming a single interdependent system. Information can be shared quickly and easily share ideas and information with each other.

6.Communication has become an easier, cheaper, and faster system with the help of information technology.

7.Social media is also another area of communication available because of information technology.

8. Businesses have become more cost effective for both themselves and their consumers using information technology. By streamlining, businesses increase their productivity.

9. Information technology has also created new jobs. Programmers, systems analyzers, hardware and software developers, and web designers all owe their jobs to information technology. Without such advances, these jobs would not exist.

PERSPECTIVE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT):

❖ **Academic perspective:**

In an academic context, the Association for Computing Machinery defines IT as "undergraduate degree programs that prepare students to meet the computer technology needs of business, government, healthcare, schools, and other kinds of organizations .... IT specialists assume responsibility for selecting hardware and software products appropriate for an organization, integrating those products with organizational needs and infrastructure, and installing, customizing, and maintaining those applications for the organization's computer users."

❖ **Commercial and employment perspective:**

In a business context, the information technology as "the study, design, development, application, implementation, support or management of computer-based information systems"[.The responsibilities of those working in the field include network administration, software development and installation, and the planning and management of an organization's technology life cycle, by which hardware and software are maintained, upgraded and replaced. The business value of information technology lies in the automation of business processes, provision of information for decision making, connecting businesses with their customers, and the provision of productivity tools to increase efficiency.

❖ **Ethical perspective:**

The field of information ethics was established by scientists Some of the ethical issues associated with the use of information technology include:

- Breaches of copyright by those downloading files stored without the permission of the copyright holders.
- Employers monitoring their employees' emails and other Internet usage

- Unsolicited emails
- Hackers accessing online databases, Web sites installing cookies or spyware to monitor a user's online activities

❖ **In Business:**

- With the introduction of computers, the business world was changed forever. Using computers and software, businesses use information technology to ensure that their departments run smoothly.
- Using information technology, businesses have the ability to view changes in the global markets far faster than they usually do. They purchase software packages and hardware that helps them get their job done.
- Most larger businesses have their own information technology department designed to upkeep the software and hardware. Information technology has allowed businesses to keep up with the supply and demand as consumers grow more anxious to have their items instantly.

❖ **In Education:**

- Information and Communication Technology can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers' professional development and more efficient education management, governance and administration.

- The Organization's Intersectional Platform for ICT in education focuses on these issues through the joint work of three of its sectors: Communication & Information, Education and Science.

- ICTs are tools for "enabling social movement leaders and empowering dictators.

- Information and communication technology (ICT) has contributed immensely to social and economic improvements, such as higher employment and productivity, increasing access to a higher quality of life.

- ICT incorporates electronic technologies and techniques used to manage information and knowledge, including information-handling tools used to produce, store, process, distribute and exchange information. This includes the ability to use technology as a tool to research, organize, evaluate, and communicate information and the possession of a fundamental understanding of the ethical/legal issues surrounding the access and use of information."

- ICT tools are also indispensable to healthcare professionals and researchers because of the current volume and complexity of information available from different sources Information management tools are thus necessary for these professionals to navigate through the vast amounts of data and information available.

- Information communication technologies play a role in facilitating accelerated pluralism in new social movements today.

- ICTs are tools for "enabling social movement leaders and empowering dictators"[1] in effect promoting societal change. ICTs can be used to garner <u>grassroots</u> support for a cause due to the internet allowing for political discourse and direct interventions with state policy as well as change the way complaints from the populace are handled by governments.

- ICT incorporates electronic technologies and techniques used to manage information and knowledge, including information-handling tools used to produce, store, process, distribute and exchange information[2]

- Benefits of ICT can be achieved directly, through improved healthcare provision and disease prevention, or indirectly, through improved social infrastructure, economic growth, or other broader determinants of population health. In the context of public health,

- ICT, if properly designed and implemented, can generate many positive outcomes: improved access for communities in rural or remote areas; support of healthcare professionals; real-time disease surveillance; data sharing; and data capture, storage, interpretation, and management.[3]

The US National Higher Education ICT Initiative (2003) defines ICT knowledge as "the ability to use digital technology, communication tools, and/or networks appropriately to solve information problems in order to function in an information society. This includes the ability to use technology as a tool to research, organize, evaluate, and communicate information and the possession of a fundamental understanding of the ethical/legal issues surrounding the access and use of information." ICT tools are also indispensable to healthcare professionals and researchers because of the current volume and complexity of information available from different sources Information management tools are thus necessary for these professionals to navigate through the vast amounts of data and information available.

❖ **In Finance**

- Information technology might just working its hardest with internet transactions. As more transactions are done, the internet requires more networks, more computers, and more security programs to keep its consumers safe.
- Information technology has also made it faster and easier than ever to send or receive money. It's now also easier to open an online small business to sell whatever you might want.
- Information technology also makes it easy for finance to function on a global level. In this modern age, your credit score and credit rating is available online securely. This allows lenders, insurance companies, and businesses to run a quick credit check on you making it far easier to open credit.

❖ **In Healthcare:**

Improvements in information technology have allowed for great reform in healthcare. Most medical offices can now send and receive digital medical information from doctors you've had in the past. Changes like this allow costs to be lowered and increase the amount of time doctors can spend on patients compared to paperwork. Security improvements with information technology have made it so that your medical information is secure no matter where it's sent. You can even

have prescriptions sent digitally to local pharmacies at most medical offices. Information technology has also updated the technology a doctor can use to diagnose or treat you. Using computerized axial tomography (CAT) or magnetic resonance imaging (MRI) scans, the doctor can use a computer to create detailed images of your organs along with creating ;images that show changes in your body chemistry and blood flow. This can be helpful to find illnesses that aren't found with blood tests or other medical tests.

❖ **In Security:**

With so many transactions done online and so much information available online, it's important to keep all of that safe. Information technology makes it possible for your online data to stay secure until accessed by the proper channels. Using passwords and encryption, information technology hides your personal digital data away, and the only way it can be accessed is by companies

HINDRANCES OF USING INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT):

1. **Rise in unemployment:** By streamlining the business process, job redundancies, downsizing, and outsourcing has occurred. Many low and middle level jobs have been turned to other countries, leaving more people unemployed.

2. **Lack of job security :**Many people also credit information technology with a lack of job security. As new technology is released and jobs require more and more training, it's important for employees to stay in a learning mode in order to keep their job. Changes in technology make it difficult for older employees to adapt as quickly as their younger peers.

3.**Lack of privacy** :Although information technology continuously works on making things more secure, there is still a great lack of privacy.

4.**Lack ofproductivity:**The lack of appropriate information at the right time will result in low productivity , low quality research works, and waste of time to pursue information and even to do research which actually others had done or in other countries.

5.**Other problems:** Lack of idea about available technology, improper knowledge about adoptability of technology, lack of availability of technology resources, problems related to communication medias, tools, Lac of Skilled Employees , Environmental conditions of the society Etc.,

CONCLUSION:

However, ICT has no universal definition, as "the concepts, methods and applications involved in ICT. The broadness of ICT covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form, e.g. personal computers, digital television, email, robots. ICT hierarchy where all levels of the hierarchy "contain some degree of commonality in that they are related to technologies that facilitate the transfer of information and various types of electronically mediated communications". Skills Framework for the Information Age is one of

many models for describing and managing competencies for ICT professionals for the 21st century, must be used in diferent areas of research in order to improve its quality and make it more effective.

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