

Basic Information and Communication Technology (ICT) Skills

A presentation by

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Introduction:

Today's society is shaped by the tremendous growth and development of information and communication technology (ICT) resulting in its great dependency on the knowledge and competence of individuals from the Information and communication technology area. ICT today has become one of the basic building blocks of modern society. Institutions, organisations, and even nations now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing, and numeracy.

European Parliament and the Council, 2006 recommended Digital competence by every person to adapt to the rapidly changing world. In the same vein, Ferrari, 2013 stated that developing digital competence involves persons' ability to confidently and critically use information and communication technology for work, private and social life, and communication. The key elements of digital competence are basic ICT skills and abilities: to use a computer to search, assess, save, create, present and exchange information as well as to develop collaboration networks via the Internet.

To promote transparency, productivity, and efficiency in the judiciary as the caption in the theme of this workshop, it has become mandatory that everyone must have Digital competence and must learn to make productive use of it, be functional to meet the needs of the electronic age.

To fully understand the concept of ICT, it is important to know the meaning of the following key terms.

i. DATA:

- raw facts, figures, and details
- Symbols or signals that are input, stored and processed by a computer for output as usable information
- Information in raw or unorganized form (for example alphabets, numbers, or symbols) that refer to or represent conditions, ideas, or objects.

➤ Data is limitless and present everywhere in the universe

ii. INFORMATION: Information is data that:

- Has been verified to be accurate, meaningful, and timely
- Is specific, relevant, and organized for a purpose
- Is presented within a context that gives it meaning and relevance
- That can lead to an increase in understanding and a decrease in uncertainty
- Information could be text, sound, picture, video, etc.

iii. COMMUNICATION:

Communication refers to the sending and receiving of data and information over a communications network. It is basically the transfer of ideas, messages and information among persons, systems, devices or media such as computers, the internet, telephone etc.

iv. TECHNOLOGY

Technology is defined as making, modification, adaptation and usage of tools, techniques, systems, machines to solve a problem or achieve goals in the shortest possible time.

v. INFORMATION TECHNOLOGY (IT)

Information Technology is any computer-based tool that people use to work with information and support the information and information-processing needs of an organization.

vi. SKILLS: The ability to do something well.

vii. Information and Communication Technology (ICT) Skills?

It is the ability to use tools of information and communication technology to define one's information problem clearly, access information efficiently, evaluate the reliability, authority, and bias of the sources, and organize and synthesize one's information with the best **ICT** tools available to use it effectively and responsibly and communicate one's new ideas effectively and ethically with the appropriate **ICT** tools available.

It is the abilities that help you use computers and IT equipment. These abilities show that you can perform various tasks using a computer and other related IT

equipment, such as accessing the Internet, writing a document, using e-mails, creating presentations, and more.

Basic concept of Information and Communication Technology (ICT)

ICT is an umbrella comprising of communication devices and applications such as Radio, Satellite systems, internet, computers, telephone, Television etc. ICT is a technology that supports activities involving information. Such activities include gathering, processing, storing and presenting data. Increasingly these activities also involve collaboration and communication. Hence Information Technology (IT) has become Information and Communication Technology (ICT):

Thus, Information and Communication Technology covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form.

Components of Information and Communication Technology

❑ Hardware/ Software:

This includes Computers printers and other physical technology devices; **Software** includes operating systems and programs installed on ICT hardware devices

❑ Communication networks:

This includes telephone lines and wireless signals, which enable connections with other ICT users and the internet, it consists of hardware, programs, and information linked together as a system that transmits and receives data and information, sharing files on a cloud-based system. Etc.

❑ Know-how.

The know-how is the capability to do something well which consists of:

- Familiarity with the tools of Information and Communication Technology; including the internet
- Possession of the skills needed to use these tools
- An understanding of when to use it to solve a problem or create an opportunity.

Purpose of obtaining basic ICT skills

ICT skills range from basic, and intermediate to advance. One requires the skills of computers and software to deal with information and communication technologies. The fundamental objective of basic Information and Communication Technology skills is to be able to:

- Create
- Convert
- Store
- Protect
- Process
- Transmit/communicate
- Retrieve information by using computers, Information Technology related devices and software and to achieve these, ICT skills are necessary and highly needed.

Thus, the use of Information and Communication Technology in any establishment and in particular in the justice administration among other aims of attaining the pillars of the justice system includes:

- i. to improve the efficiency of the courts
- ii. to create higher quality work products,
- iii. conduct better research,
- iv. work more collaboratively
- v. Learn more readily,
- vi. speed up work processes
- vii. reduce cost, time, and delay
- viii. access to legal information
- ix. Access to court
- x. Serve clients more effectively and efficiently, thereby raising the quality of justice administration.

Your Information and Communication Technology skills will be determined by how much engagement you have with your technology.

What is your relationship with Information and Communication Technology (ICT)?

Could you identify with any of the following ICT Skills?

1. The ability to switch on a computer, login and connect to the appropriate platforms and programs
2. Using popular software packages, such as Microsoft Office, to create, edit and save documents
3. Ability to identify and use ICT hardware to scan, print, and copy documents
4. The ability to use a digital camera to capture photographs or video footage
5. The ability to edit images using computer software like Adobe Photoshop, CorelDraw, etc
6. The ability to use a search engine (such as Google, Bing) to find information.
7. Browsing and posting on social media accounts (such as Facebook, WhatsApp, or YouTube)
8. The ability to use computers and the internet safely, for example, keeping personal information private, and avoiding viruses, identity theft, and other online threats
9. Sending and receiving information using data-sharing applications and cloud storage systems, for example, Email, Google Drive, Dropbox etc
10. Ability to identify different types of computer ICT devices, desktops, Ipad, smartphones, etc.
11. Possess typing and editing skills, formatting skills, graphics designing skills, proofreading skills, etc. presentation skills, spreadsheet skills, etc.
12. Ability to identify computer cables and connections? e.g. Power cables, USB cables, Internet cables, etc
13. Ability to identify different ports for connecting the various cables, LAN, HDMI, VGA, USB, etc.
14. Ability to know your basic ICT terms, keys, what they mean and their functions e.g. save as, save, Right Click, Drag, Drop, Double Click, browsers, folders, icons, drive C, cloud storage, IP Address, Desktop, Microsoft Office, OS, cut, copy, paste, undo, redo, Ctrl V, Ctrl C, Ctrl X, Ctrl-A, portrait, landscape, Log off, Hibernate and many more
15. Ability to be safe online by avoiding some popup text messages e.g. Congratulations you have won a free car, it is malware.
16. The ability to use software (such as Microsoft Word, and Microsoft Publisher) to produce professional documents like PowerPoint presentations, letters, leaflets, or posters.

In today's society, almost every task requires some ICT skills, and many require hybrid skills to make you functional.

Classification of ICT Skills

1. Computer Literacy Skills.

This skill embraces simple knowledge and understanding of Information and Communication Technology devices like desktop computers, laptops, photocopiers, printers, scanners, laptops, Laminating Machine, networks etc; word processing programs, presentations programs, spreadsheets, and other standard tools to solve a problem. It helps you to be familiar with keyboard operations, Mouse operations, Keyboard Keys and functions, desktop environment, booting and shutting down the system, restart, log on and log off.

2. Microsoft Office Suite Skills

Microsoft Office is used in most homes, workplaces, and educational establishments, so it's vital that you know how to use the MS Office suite which consists of, MS Word, MS Excel, MS PowerPoint, etc.

Microsoft Word:

Ability to create Word documents. One needs to produce written documents including business letters, meeting minutes, and more using Microsoft Word. The skills related here is to create, edit, collect, store, manipulate, search, select, produce, evaluate and organise digital information needed for accomplishing basic office task. Be familiar with the followings:

- The ability to use a word processing program (such as Microsoft Word) to create letters, agendas, and minutes. Ability to use Audio recording and transcription skills.
- Ability to create and save documents, edit documents, format text and paragraphs, as well as be able to add tables and graphics to your documents to make them more visually appealing.
- Ability to work collaboratively with others to ensure you make the process as smooth and efficient as possible. i.e. using features such as track changes, and ensuring that you highlight your edits by using the comment feature. This will make it easier for others to see the edits you have made, and approve or reject them as necessary. It also makes it easier to keep track of all the versions of the document, to ensure you can revert to an earlier version if needed.
- Ability to identify User interface. e.g. Ribbon, control bar, title bar, status bar, etc
- Ability to identify on-screen elements common to MSOffice Suites
- Editing, Proofing e.g. check spelling, find/replace, thesaurus; Formatting Text e.g. font, font size, align text, etc.
- Ability to deploy formatting techniques to enhance the appearance of the document.
- Ability to print documents; memos, letters, etc
- Ability to type quickly and correctly.

Ms Excel:

- Ability to develop and manage simple data using spreadsheets.
- Ability to analyze the data and recognize trends and patterns.
- Ability to create a file, and set up a spreadsheet to contain the data you need with ease. You should also be able to save your file regularly to make sure you don't lose any changes you may have made.
- Ability to work with numbers, perform, calculations and create tables, graphs, charts etc
- Ability to link your sheets together and be able to format Excel files so that they appear clear and readable
- Ability to use to create formulas and functions which make your spreadsheets a lot easier to manage.

Ms PowerPoint:

- Ability to use Microsoft PowerPoint tools to create professional-looking presentations with ease.
- Ability to use different slide types, effects, and animations to create amazing presentations.
- Ability to create and edit the information that will appear in slides

3. Files organisation skills

These skills required one to organise files into different categories for easy identification, easy access, and quick retrieval.

Skills to efficiently manage files e.g. find, copy, rename, and recover.

Ability to efficiently and effectively organised files into categories like Images, Video, Audio, Documents, Installation files, downloads files etc. Ability to create folders for storing other important information.

Here one should possess the skills to

- Keep files logically organised in folders so that you know where every document or file is located when you need it.
- Copying a file/folder, moving a file/folder, delete files/folder, restoring files/folders, Show or Hide Hidden Files and Folders, Compressing Files and Folders, searching for files /folders, Restoring files from the Recycle Bin, Emptying the Recycle bin.

- Back up important files in either an External Hard disk or in cloud services e.g. Onedrive, Google Drive, Dropbox, etc or other storage devices, just in case.

4. File Type/ extension Skills:

There are different file extensions and file types used with computers, the ability to understand and identify the basic ones gives you the added advantage in information handling. e.g.

Audio: .cda, .mp3, .mpa, .wma etc,

Image file: .bmp, .gif, .jpeg, .png etc,

Presentation file: .ppt, .pptx, etc,

Spreadsheet file formats: .xls, .xlsx etc,

System files: .cab, .cfg, .dll, .sys, .tmp;

Video file: .avi, .mp4, .mpeg, .wmv,

Word processor file: .doc, .docx, .rtf, .wpd, .pdf.

5. Storage/Backup Skills.

- Ability to identify the features and benefits of different storage **media**
- Ability to identify different storage locations which include; an external hard drive, CD, DVD, USB Flash drive, Memory Card, and cloud storage. etc and be able to put it into use at the appropriate time.
- Ability to back up your information for easy recovery in case of damage, theft, etc
- Ability to store information online so that it could be accessed from more than one device anytime, anywhere. Example
 - ✓ **Google Drive**
Free storage allowance: 15GB (expandable).
 - ✓ **Microsoft OneDrive**
Another sterling storage solution, particularly for Windows users
Free storage allowance: 5GB
 - ✓ **Dropbox**
Free storage allowance: 2GB (expandable)
 - ✓ iCloud

6. Multitasking skills –

This requires the skills of doing multiple tasks or processing multiple jobs at the same time. e.g. one will be composing a mail, printing copies of a document, downloading documents, listening to a piece of music, or tutorial on how to develop computer skills at the same time.

- Ability to integrate files from different applications
- Ability to integrate basic ICT devices – Including Desktop, printers, scanners, photocopiers, smartphones, tablets, and projectors.

7. Email Skills

Email skills enable one to effectively and successfully set up emails, compose/reply mail to colleagues, employers, clients, vendors, and so on.

- Ability to identify components of e-mail
- The ability to use an email solution (such as Microsoft Outlook, yahoo mail, Gmail) to communicate with internal and external contacts, keep calendars up to date, and book meetings.
- The ability to have an in-depth knowledge of email systems, and to create and manage user accounts will be advanced skills.
- Be familiar with the popular Email Accounts e.g. Yahoo, Gmail, Outlook, etc.

8. Online Research Skills

- This involves basic online information management skills,
- Ability to quickly and efficiently search the web to find the information you need.
- Ability to identify different browser and access the internet e.g. Microsoft Edge, Mozilla, Chrome, Safari, Google, UC Browser, Phoenix Browser etc.
- Ability to conduct online research through YouTube, Google, etc
- Being familiar with eLearning platforms, online registration, signup, etc.
- Ability to complete online training competently.
- Ability to complete an online quiz etc
- Ability to stay online **safely**

9. Social Media skills

Social media are interactive digital channels that facilitate the creation and sharing of information, ideas, interest, and other forms of expression through virtual communities and networks. Some tasks require you to use social media. The more you know about the benefits and limits of social media, the more you can begin to use that media in valuable ways at work. The most popular ones include e.g. Facebook, WhatsApp, YouTube, Twitter, etc
Ability to chat with team members, create group chats, and share documents via social media apps, etc.

10. Online Collaboration skills

Online collaboration refers to any means of sharing information with your colleagues, supervisors, or clients online.

- Ability to be familiar with video conferencing tools such as Microsoft Teams, Zoom and Skype, and feel comfortable participating in video conferences.
- Ability to access and share your files anywhere, anytime on any device connected online.
- Ability to use online tools to accomplish your task

11. Desktop Publishing

Desktop publishing involves in-depth knowledge in the creation of materials that need to be printed and distributed. This involves the ability to create flyers, brochures, newsletters, with common applications such as MS Publisher, MS PowerPoint, MS Word, Corel Draw, Photoshop etc.

12. Mobile Skills:

Mobile skills foster competency in interaction with basic digital tools. e.g. iPad, laptop, smartphone devices, laptops etc. Here it is important to know how to synchronise these digital devices in accessing information, email, composing text messages, creating WhatsApp groups, sharing files using Bluetooth, Apps etc. Basic skills here cover the hardware and software know-how that are required to use various technological assets (computers, smartphones, software (word processors, applications)), online operations (Internet, search engines, social networks, e-commerce, privacy), and communication media.

13. Network /Communication Skills:

The Network/communication skills relate to transmitting, exchanging information, and working with others remotely through technology.

Here:

- exchange of data between users that have network access,
- access to shared devices, such as network printers, network disks, etc.,
- Enables user communication and socializing, etc.
- Ability to use digital devices to record proceedings, and minutes and transcribe them later
- Ability to connect devices to a simple network,
- Ability to connect devices through Bluetooth
- Ability to setup wireless network
- Ability to set up a hotspot and connect devices
- Ability to determine whether there is internet access/connection or not.
- Ability to access the internet using different devices
- Ability to identify how hardware devices are connected to and installed on a computer system.
- Ability to perform online banking transactions.

14. Internet Skills

- Ability to identify and locate browser and navigate the internet
- Ability to locate where to type a web address and browse the internet.
- Ability to conduct a search and get results
- Ability to download and locate downloaded files
- Ability to understand how to navigate using a browser, e.g. Google, Chrome, edge, Microsoft Edge, Mozilla, Safari etc.
- Ability to do online registration, sign up
- Clear browsing history on your browser of any computer you use online.
- ability to identify fake websites from genuine websites
- Ability to identify which website has genuine information
- Ability to be safe online why conducting a simple online search
- Ability to identify and understand the concept of hyperlink
- Ability to identify spam and phishing emails, messages etc.
- Ability to carry out some basic online transaction e.g. cash transfer, pay Bills
Airtime recharge, etc
- Ability to use code to USSD code to do basic operations and verification

15. Ethical Skills

- These skills promote the ethical behaviour of the ICT users, which is the ability to know what is right and wrong.
- Learning to use technology responsibly
- Understanding the risk and opportunities on the internet
- Ability to understand the limits of sharing information
- Ability to identify common factors that can cause damage to computer hardware
- Ability to protect, and defend information from unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording or destruction.

16. Sign Skills to know that your computer is infected with a virus

- The computer suddenly slows down after installing a program downloaded from the internet
- If the CPU usage is always reaching 100% without doing any useful task then you can suspect that some kind of virus or malware is present on your computer.
- Nagging messages appearing and the computer gets slow
- Unnecessary actions like moving the mouse automatically with your control.
- If you cannot eject your flash drive without any document or program open from that Flash drive, you are infected with a virus.
- If you cannot see the folder options from windows explorer
- If you cannot show the hidden files using folder options,

- If files are automatically created with unknown names it is a sign of virus activity.
- Messages with attachments appear from people you do not know
- If you cannot double click and access drives in My Computer it can be an activity of a virus.
- Ability to identify free-of-charge tools on the internet as they serve as possible threats to the computer.

Skills on ICT safety and Measures

- Use good, cryptic passwords that cannot be easily guessed.
- Keep your passwords secret.
- Make sure your computer's operating system and applications are protected with all necessary security "patches" and updates.
- Make sure your computer is protected with up-to-date anti-virus and anti-spyware software.
- Do not click on unknown or unsolicited links or attachments, and do not download unknown files or programs onto your computer.
- Remember that information and passwords sent via standard, unencrypted wireless are especially easy for hackers to intercept.
- Look for "https" in the URL before you enter any sensitive information or a password (The "s" stands for "secure").
- Also avoid standard, unencrypted email and unencrypted Instant Messaging (IM) if you are concerned about privacy.

Some tips to boost your ICT skills.

1. **Practice using technology.** If you already have some of the basic skills listed above, you might consider simply using them more often. For example, if you want to get better at using Skype or Zoom before an interview, simply practice using video conferencing technology. Use typing tutors to improve your typing skills etc. The more you practice, the more confident you will feel when you use this technology.
2. **Ask a friend.** You could also ask a friend who is more skilled in a particular technology to help you develop your skills.
3. **Watch a (free) tutorial.** There are many free online tutorials on how to use certain technologies. Some of these are on YouTube or can be found via a quick Google search.

4. **Attend a (free) class.** Free classes are available or at a discount, one could search within and probably find one.

Information and Communication Technology has taken over almost every sphere of human endeavor redefining the nature of transaction between persons, the nature of interaction of entities as well as the speed and efficiency of exchange of information. Therefore ICT skills have become an indispensable tools and requirements needed in our modern society, in our homes, schools, offices, hospitals, courts, prisons, etc. Having these skills will help you to organise your workload, streamline processes, collaborate effectively and access digital information,

You can no longer do anything today without using it. Hence, the need to inculcate Digital competence in **EVERYONE** to promote transparency, productivity, and efficiency in the judiciary as the caption in the theme of this workshop.

Thank you all for your kind attention.

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