Challenges and Considerations of Generative AI in ICT

1. Data Privacy and Security

Generative AI learns from huge amounts of data - and sometimes that data includes people's personal information.

Imagine if a chatbot accidentally shared private medical info or company secrets - that's a big problem.

We need to make sure AI systems don't leak or misuse personal data.

Use strong security, protect user privacy, and follow laws like GDPR.

2. Ethical Use and Bias

AI learns from human data - and that data can include biases.

If the data mostly shows male engineers, AI might wrongly assume engineers are usually men.

Train AI on diverse data and test it carefully to ensure fairness.

3. Copyright and Ownership

If AI creates an image or story, who owns it?

Also, AI might copy existing works from the internet without permission.

Push for clear legal guidelines and avoid using protected materials.

4. Misinformation and Deepfakes

AI can make very realistic fake videos, photos, or articles - called deepfakes.

Imagine a fake video of a leader saying something dangerous.

Use detection tools and teach people to be careful online.

5. Job Loss and Skills Gap

AI can do some jobs faster and cheaper than humans, especially in ICT.

This might lead to job changes or losses.

Help people learn new skills to work with AI, not be replaced by it.

6. Over-Reliance on AI

AI can be wrong, even if it sounds confident.

Relying on it too much without checking can lead to mistakes.

Always double-check AI's output and involve human oversight.

7. Environmental Impact

Training large AI models uses a lot of electricity.

That means a big environmental cost.

Make AI more energy-efficient and consider eco-friendly methods.

8. Lack of Rules and Regulation

AI is growing fast, but laws and regulations are slow.

This can lead to unsafe or unfair use of AI.

Create and follow clear rules to use AI responsibly.

Final Thoughts

Generative AI is powerful - but we must use it responsibly.

Respect privacy, avoid bias, stay ethical, and keep learning.

Always use AI to help people, not harm them.