Polity & Governance · GS - II

Implementation of information and Communication Technology (ICT) based Projects / Programmes usually suffers in terms of certain vital factors. Identify these factors, and suggest measures for their effective implementation.

EXAM YEAR	PAPER	SUBJECT
2019	GS - II	Polity & Governance

MARKS	WORD LIMIT
10	~150 words

Answer Hint

Digital infrastructure; digital divide; project planning; interoperability; capacity building; cybersecurity; data privacy; change management; stakeholder participation; monitoring and evaluation

Model Answer

Introduction

Information and Communication Technology (ICT) can improve governance, transparency and service delivery. However, technology projects often underperform when implementation fails to address institutional, technical and social realities.

Major Factors

- **Inadequate infrastructure:** Poor connectivity, unreliable electricity and limited devices restrict access.
- **Digital divide:** Low digital literacy, language barriers and disability-related obstacles exclude users.
- **Weak project design:** Unclear objectives, unrealistic timelines and insufficient consultation create implementation gaps.
- **Interoperability problems:** Incompatible databases and systems prevent seamless information exchange.
- **Capacity constraints:** Insufficient training and technical expertise weaken implementation.

- **Cybersecurity and privacy risks:** Insecure systems reduce public trust and expose sensitive information.
- **Resistance to change:** Officials and users may resist unfamiliar processes or perceive digital systems as additional burdens.
- **Weak monitoring:** Poor evaluation and inadequate grievance redressal make it difficult to identify failures.

Measures for Effective Implementation

1. Conduct needs assessments and pilot projects before scaling up.
2. Provide reliable connectivity, power and accessible digital infrastructure.
3. Train public officials and users in relevant digital skills.
4. Adopt interoperable standards and secure-by-design systems.
5. Protect personal data and establish clear accountability.
6. Involve stakeholders and provide assisted and offline service options.
7. Monitor outcomes through independent evaluation and user feedback.

Conclusion

Successful ICT implementation requires institutional reform alongside technological investment. User-centred design, capacity building, security and continuous evaluation can transform digital projects into effective public-service instruments.

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