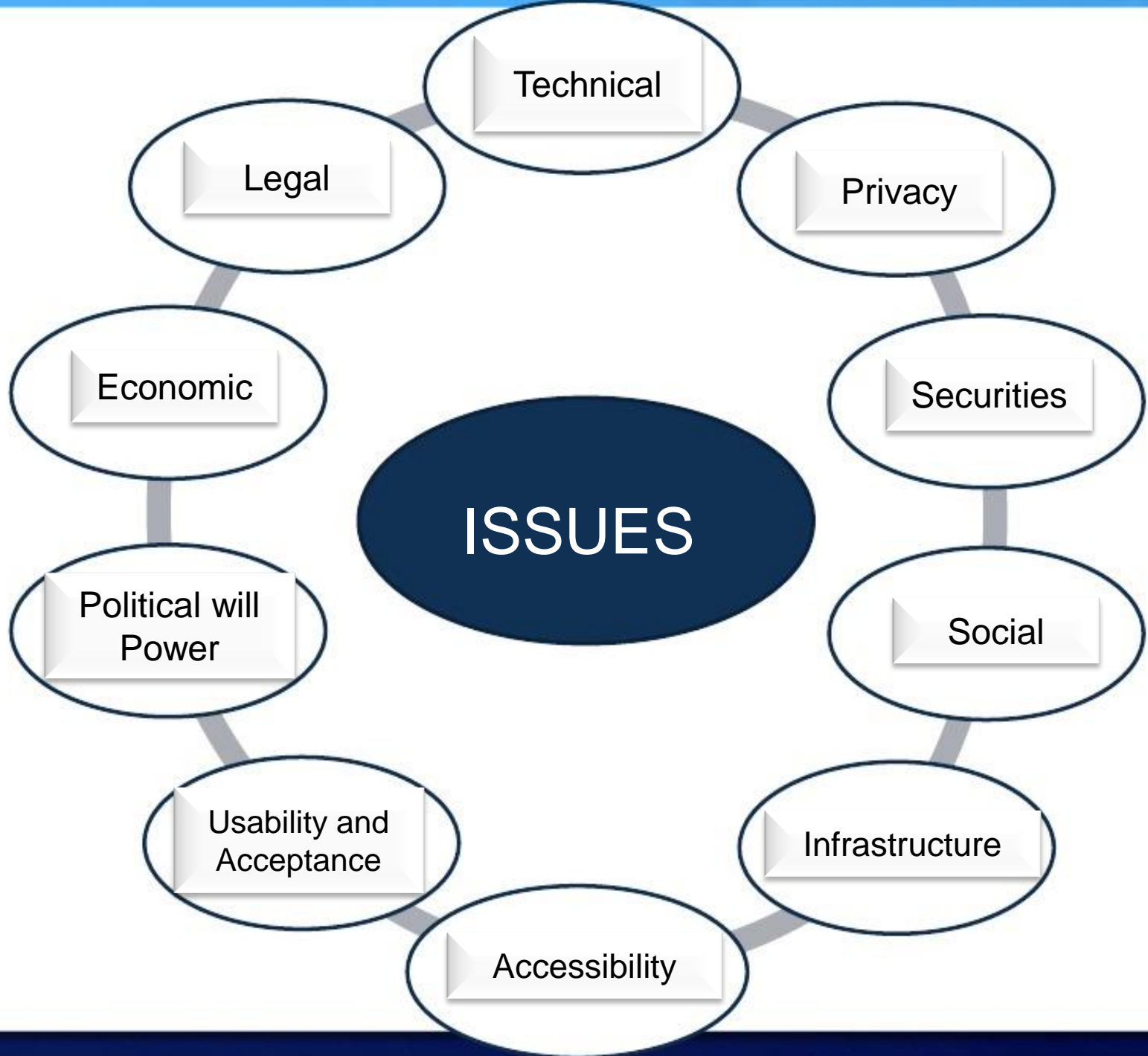




Issues & Challenges in E-Governance





Technical Issues

- IT infrastructure is the backbone of E-governance.
- Interoperability with existing software and hardware platforms is a key success factor.
- Finally, some legal aspect, like security and privacy, must be considered, as personal data are processed and stored, and financial transitions must be executed.

Privacy Issues

- Citizens' concern on privacy of their life and confidentiality of the personal data need to be technically supported
- Privacy and confidentiality has to be highly valued in establishing and maintaining websites.
- An ideal Cyber policy and strict appliance of it is the backbone for citizen's support.

Securities

- The financial transaction demands for transactional security. All support for full security is necessarily needed to maintain.
- An ideal Cyber Security Policy will ensure the existence of a sound and secure e-governance and critical infrastructure base in India.

Social Issues

- Acceptance and usability by a large variety of people make e-governance successful
- The interface must be usable by rich or poor, disabled or elderly people, understandable by low literacy or non-native language people, etc.

Infrastructure

- Social, geographical and economical disparity issues have to be removed and proper infrastructure is required to establish e-governance.
- The ICT facilities need to be developed and should be available to one and all citizens.
- Internet connection through satellite, phone lines or through cable or Television should be accessible for all especially to the people in rural areas.

Infrastructure

- Comparison of ICT usage between India and developed countries.

Country	PCs 100	Tele lines 100	% of population on line
India	0.45	3.20	1.2
USA	58.52	69.97	62.1
Canada	39.02	67.65	46.5
UK	33.78	67.65	55.3
Australia	46.46	52.41	52.5
New Zealand	36.02	49.57	46.1
Singapore	48.31	48.57	49.3

Accessibility

- Any service should be accessible by anybody from anywhere at anytime.
- Even if Internet population is exponentially growing in India, still there is a significant portion of the people who may not be able to access services for various reasons like limited access to ICT technologies and devices, low literacy, or phobia for Computer etc. Therefore, universal access is still a mirage.

Usability & Acceptance

- People especially in rural areas are often not expert users and need guidance and support for their transaction.
- Governmental websites must be user friendly, to be effective.
- A reconceptualization of government services is mandatory for successful implementation and to get social acceptance.

Political will power & Economic issues

- E-governance means less interaction with government servants, it will be helpful in reducing bribery issues.
- Economical issues are mainly concerned with return of investment and safeguard of the previous ones. Cost of implementation, operational and evolutionary maintenance must be low enough to guarantee a good cost/benefit ratio.

Legal issues

- Strong and effective rules related with IT has to be formulated and strongly implemented. This presupposes the adoption and use of security measures more particularly empowering and training judiciary and law enforcement manpower with the knowledge and use of cyber forensics and digital evidencing.

Other issues

- Underutilization of existing ICT infrastructure.
- Attitude of Government Departments and government officers need a proper counseling. Many officers perceive their department as most important and disregard other department's needs.
- Lack of coordination between Govt. Department and Solution developers.
- Resistance to re-engineering of departmental processes is also a challenge, but this approach is changing now.

Concern for E-governance in India

	RURAL	URBAN
I S S U E S	Lack of infrastructure	Concern for security
	Less literacy	Concern for privacy
	Less computer literacy	Lack of time
	Lack of awareness of the function	
	Fear from bureaucracy	
	Social and economic disparity	
S O L U T I O N S	Education	Technical supported security & privacy through Bio-metrics etc.
	Computer & Internet Education	Well placed IT & security rules
	Transaction through other media like phone or mobile or cable TV	Inter-operability
	Proper Training	One stop shopping
	Cheap & Simple procedure	Transparent system
	Availability of ICT facilities	
	Easy to operate	
	Accessibility to all	

Need of the Hour



Database of citizens

- It should contain all the personal details i.e. name, address, citizen Id, etc. and financial information. Every citizen should have a unique Id number and password.
- The citizens can access their information and transactions through this but at the same time the other people won't be able to access their record.
- Just by going through his/her file the individual will come to know about their electricity bill, bank statements, next due LIC premium, phone bill etc. and can transact with all or any of the department at the same time.

Biometrics

- The strong database needed for a successful e-governance is vulnerable to fraud. There are attempts being made to come up with “Biometric” techniques, which are more secure.
- The password can be replaced as an individual’s mark of identity, fingerprints or facial characteristics to verify the identity. Instead of having card readers, there should be devices like fingerprint readers or eye scanners.
- It is one of the important evolving technologies, which will ensure the security and privacy issues as well. But underutilization of these techniques is one of the barriers.

Smart Cards

- One smart card with complete detail of the citizens is the smartest solution. A smart card with citizens name, address, financial information, personal information etc. fully supported and secured by Biometrics may be the key solution.
- A fully secured card with easy operability can be used for all transactions and information. One such project was pilot run at IIT Bombay campus few years back.

Legal Framework for E-Governance



Framework for privacy, Data Protection and Security

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graph TD; A[Framework for privacy, Data Protection and Security] --> B[Privacy Act]; A --> C[IT (Amendment) ACT, 2008]; A --> D[Other Laws]; B --> B1[Proposed laws: applicable to body private and government bodies]; C --> C1[Section 66-70 : Cyber security]; C --> C2[Section 69: legal interception and monitoring computer resources]; C --> C3[Section 70: Critical infrastructure protection]; C --> C4[Section 84 A: Encryption]; D --> D1[Indian Penal Code]; D --> D2[Contract Acts]; D --> D3[Copyright Act]; D --> D4[Banking & Insurance laws]; D --> D5[Telecom laws]; D --> D6[Consumer laws]; D --> D7[Corporate laws]; D --> D8[Intellectual property laws]; D --> D9[All other acts of e-governance]; D --> D10[etc];
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Privacy Act

Proposed laws:
applicable to body
private and
government
bodies

IT (Amendment) ACT, 2008

- Section 66-70 : Cyber security
- Section 69: legal interception and monitoring computer resources
- Section 70: Critical infrastructure protection
- Section 84 A: Encryption

Other Laws

- Indian Penal Code
- Contract Acts
- Copyright Act
- Banking & Insurance laws
- Telecom laws
- Consumer laws
- Corporate laws
- Intellectual property laws
- All other acts of e-governance
- etc

Right to Information Act 2005

- Right to Information Act 2005 mandates timely response to citizen requests for government information. It is an initiative taken by Department of Personnel and Training, Ministry of Personnel, Public Grievances and Pensions to provide a RTI Portal Gateway to the citizens for quick search of information.
- The enactment of the RTI Act, 2005 gave a fillip to transparency in government dealings and concurrently provided some protection against the unwarranted disclosure of confidential information under that law.

IT Act 2000

- The IT Act 2000 attempts to change outdated laws and provides ways to deal with cyber crimes. The Act offers the much-needed legal framework so that information is not denied legal effect, validity or enforceability, solely on the ground that it is in the form of electronic records.
- In view of the growth in transactions and communications carried out through electronic records, the Act seeks to empower government departments to accept filing, creating and retention of official documents in the digital format. The Act has also proposed a legal framework for the authentication and origin of electronic records /communications through digital signature.

Highlights of IT Act 2000..

- Email would be a valid and legal form of communication in India that can be duly produced and approved in a court of law.
- Companies shall now be able to carry out electronic commerce using the legal infrastructure provided by the Act.
- Digital signatures have been given legal validity and sanction in the Act.
- The Act throws open the doors for the entry of corporate companies in the business of being Certifying Authorities for issuing Digital Signatures Certificates.
- The Act now allows Government to issue notification on the web thus heralding e-governance.

Highlights of IT Act 2000...

- The Act has given a legal definition to the concept of secure digital signatures that would be required to have been passed through a system of a security procedure, as stipulated by the Government at a later date.
- Under the IT Act, 2000, it shall now be possible for corporates to have a statutory remedy in case if anyone breaks into their computer systems or network and cause losses damages or copies data. The remedy provided by the Act is in the form of monetary damages, not exceeding Rs. 1 crore.

IT Act Amendment 2008

- Until a couple of years ago, Indian law had no provisions dealing with privacy protection. In 2008, the IT Act was amended to introduce the following:
- A new civil provision prescribing damages for an entity that is negligent in using “reasonable security practices and procedures” while handling “sensitive personal data or information” resulting in wrongful loss or wrongful gain to any person.
- Criminal punishment for a person if (a) he discloses sensitive personal information; (b) does so without the consent of the person or in breach of the relevant contract; and (c) with an intention of, or knowing that the disclosure would cause wrongful loss or gain.

Indian Privacy Law 2011

- On April 11, 2011, India's Ministry of Communications and Information Technology notified the IT Rules, 2011 under the IT Act, 2000. India now has a privacy law, brought into force with immediate effect with wide ramifications on the way companies will do business in India.
- Sensitive Personal Information - The law relates to dealing with information generally, personal information and "sensitive personal data or information". SPD is defined to cover the following: (a) passwords, (b) financial information such as bank account or credit card or debit card details; (c) physical, physiological and mental health condition; (d) sexual orientation; (e) medical records and history; and (f) biometric information.

Indian Privacy Law 2011..

- Privacy Policy - Every business is required to have a privacy policy, to be published on its website. The business has to also appoint a Grievance Officer. The privacy policy appears to be required whether or not the business deals with SPD.
- The privacy policy must describe what information is collected, the purpose of use of the information, to whom or how the information might be disclosed and the reasonable security practices followed to safeguard the information.

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