



India R&D 2009 ICT Innovations

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E-governance in ICT Innovations

A Presentation

by

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I Introduction

- E-governance is application of ICT to governance
- It is more than a decade old (1993)
- Substantial investments are being made in e-governance
 - USA- US\$ 65 billion
 - UK- GBP 14 billion
 - India- Rs 40 billion (Rs 4,000 crore),
Expected by 2009: Rs 100 billion (Rs 10,000 crore)
 - China- \$30 billion (RMB 250 billion, US \$1=RMB 8.27) (2005)

IT A Proven Engine of Economic Growth

- IT sector is a proven engine for global economic growth.
- The global trillion-dollar-a year IT sector (hardware, software, and IT services) consists of
- 1.1 million businesses, supporting
- 11 million high-paying IT jobs,
- generating nearly \$900 billion annually in taxes, and
- adding \$1.7 trillion per year to global economic prosperity.

(Source: IDC/BSA)

Contribution of E-governance to GDP

- E-government is estimated to contribute to GDP growth at 2% in the European Union in 2005-2010. (Corsi et al. 2006)
- 'Given the large share of public sector (PS) in European countries' GDP, efficiency in public administrations is an objective per se and a major driver of international competitiveness and economic welfare.
- E-government enhances GDP growth through four channels:
 - (i) growth of PS productivity, (ii) growth of PS total output, (iii) efficiency of public administration and (iv) as part of aggregate demand (ibid.).

IT Competitiveness and Innovations

- **India's IT success story is legendary,**
- **Having grown from a US\$60m industry in 1991 to one generating US\$43bn in revenue today.**
- **However it ranks 48th in IT industry competitiveness in a league of 66 countries (2008)**
- **Down from 46th rank (2007) in a league of 66 countries**
- **Innovations hold the key to improve IT competitiveness**

II Government's Contribution to Development of ICTs

Global

- **Venture Fund (spawning many start-ups)**
- **Internet (e-commerce, e-government, etc.)**
- **Internet 2**

Indian Initiatives

- **National Policies in different Sectors (IT, Telecom, S&T and Education)**
- **Disinvestment (VSNL, CMC)**
- **Privatisation in Telecom Sector**
- **Launching of National E-governance Plan (NeGP) (First Phase: 2003-2007; Second Phase: 2007-)**
- **Setting up 1,00,000 common service centres (CSCs) covering 6,00,000 villages**

Indian Initiative in Venture Funding

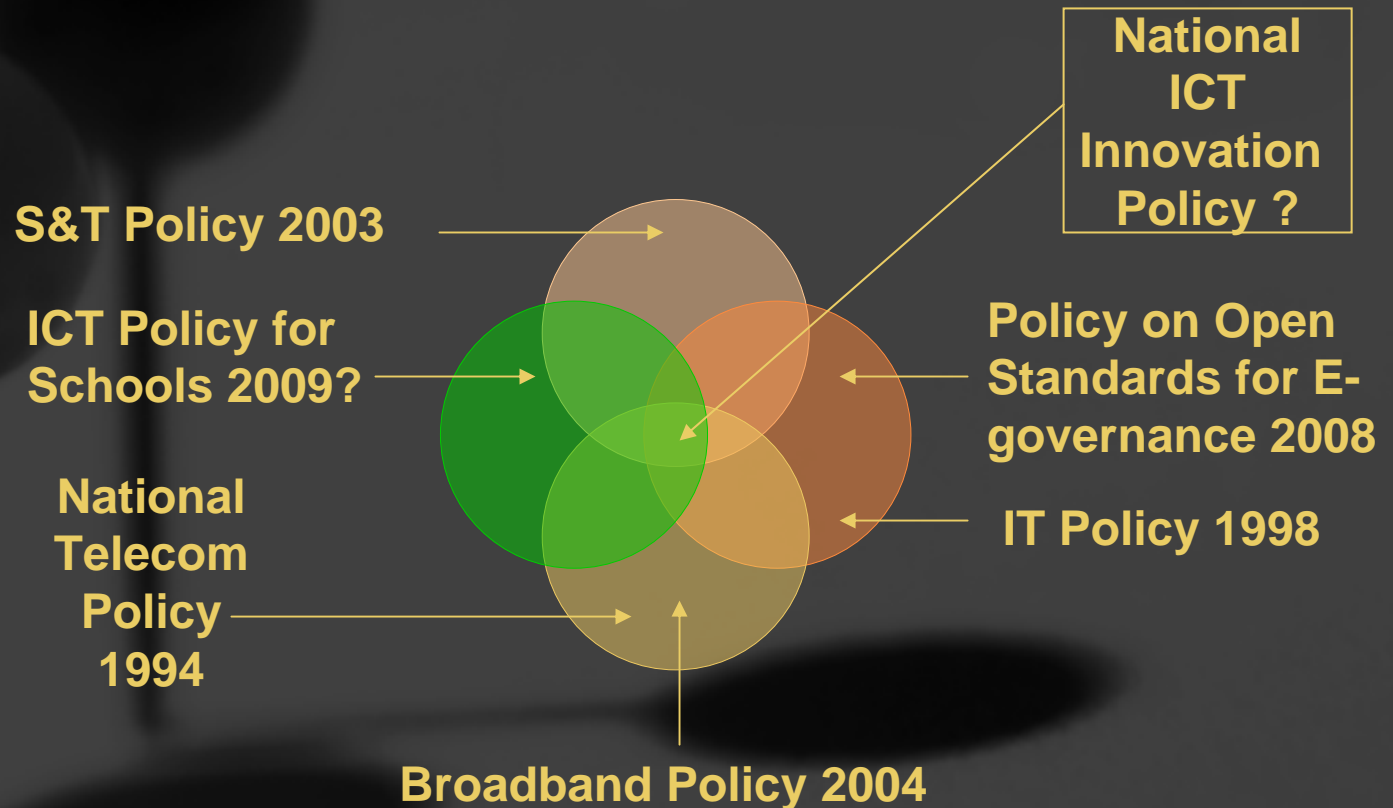
- National Venture Fund for Software and IT Industry (NFSIT)
- **SIDBI, MIT & IDBI**
- **SIDBI Venture Fund Ltd. (Rs. 100 crore/ US\$ 22.22 million) (1999)**
- **10-year Closed Fund**
- **State level Venture Funds**
- SME Growth Fund (Rs 500 crore) (2004)
- **SIDBI and Public Sector Banks**
- **8-year Fund**

III Bottlenecks in Ecosystem

- a) **Absence of National ICT Innovation Policy**
- b) **Inadequate Legal Framework**
- c) **Inadequate Intellectual Property Rights Framework**
- d) **Complicated Architecture of Open Source**
- e) **Absence of Entrepreneur Grievance Redress Architecture**
- f) **Out-of-sync Bureaucracy**

(a) Absence of National ICT Innovation Policy

National ICT Innovation Policy?



(b) Inadequate Legal Framework

- An efficient judiciary stimulates economic growth by aiding market development, facilitates foreign investment, enforces property rights, and most importantly helps in poverty alleviation.
- A University of Bonn's study reports that an efficient judiciary can increase per capita income by 1.9%.
- Similarly it cites another study which reports that Brazil's gross domestic product has slowed down by about 20% as a result of judicial dysfunction. It reports that an efficient legal system is crucial for economic growth.

(c) Inadequate Intellectual Property Rights Framework

- **General Agreement on Tariff and Trade (GATT) (1947)**
- **World Trade Organisation (WTO) (1986)**
- **Trade-Related Aspects of Intellectual Property Rights (TRIPS)- Dunkel Draft (1993)**
- **IPR- (a) Copyright,**
(b) Industrial Property- (i) Trade Mark and Geographical Locations,
(ii) Inventions (patents), industrial designs and trade secrets.

(d) Complicated Architecture of Open Source

- Copyright and Copyleft
- Open Source Software and Hardware
- Where is *Simputer*?
- Patents
- Contract
- Trademarks
- Layout Designs of integrated circuits (ICTs)

(e) Absence of Entrepreneur Grievance Redress Architecture

- **ICT innovations have to be translated into entrepreneurship**
- **This requires pro-active policies at *all* levels of government**
- **At present there is no entrepreneur grievance redress architecture**
- **Setting up business in India is still a complicated task (registration, licenses, no objection certificates, etc.)**
- **Administrative simplification is the need of the hour**

(f) Out-of-date Bureaucracy

- **Industrial age bureaucracy for information age, a serious mismatch**
- **Visionless, rule-bound, negative, risk-averse and entrepreneur unfriendly**
- **New Public Management (NPM) no answer**
- **No formal recognition of e-civil service**
- **Open, transparent and entrepreneur-friendly government is a far cry**
- **This hampers ICT innovations and thus India's IT competitiveness at global level**

IV Conclusion

I. Prepare a National ICT Innovation Policy

II. Develop 1,00,000 Common Service Centres

Covering India's 6,00,000 villagers under Natiional E-governance Plan (NeGP)

As ICT Innovation Centres, and not merely as conduits for public service delivery, and

III. Create a Conducive Environment for promoting ICT Entrepreneurship



End of Presentation

Thank you.

--Dr D.C.Misra