

Executive Summary

While technology shapes the future, it is people who shape technology, and decide to what uses it can and should be put. This has been a historical progression ever since the discovery of wheel in Ancient China. At the turn of the second millennium, societies, the world over, are being fundamentally changed by the emergence of a new technological paradigm based on information & communication technologies (ICTs).

Technology is a mediating factor in a complex matrix of interaction between social structures, social actors, and their socially constructed tools, including technology. As information and communication are at the core of human action today, the transformation of the technological instruments of knowledge generation, information processing, and communication, has far reaching implications, which add specific *social effects* to the broader pattern of *social causation*.

This new technological paradigm emerged as a systemic feature in the 1970s, expanded throughout the 1980s to the domains of military power, financial transactions, and high technology manufacturing, diffused in the late 1980s in workplaces of all kinds, and deeply penetrated homes and culture in the 1990s, with the explosive diffusion of Internet, and multimedia. New information technologies have diffused much faster than revolutionary innovations of the two industrial revolutions. And yet, countries, cultures, and social groups, are extremely different in their degree of absorption, and utilization of new technologies. But all countries, and all peoples, are directly or indirectly, exposed to the structural transformation mediated by this technological revolution.

The New Economy

Information technologies have been decisive tools in the emergence of a new economy in the last two decades of the 20th century. This is certainly a capitalist economy – indeed for the first time in human history, the entire planet is working along the lines of a capitalist economic system. But it is a new brand of capitalism. It is global, it is informational, and it is based on business networks. A global economy is an economy whose core activities work as a unit in real time on a

planetary scale. Here, core activities include financial markets, science and technology, information and communication, international trade, high-skill labor, and multi-national firms and networks of producers and distributors of high value added goods, and services.

A networked economy is one in which units of production, distribution, and management are organized in networks. A network is a set of inter-related units that depend on each other for the performance of their common task. The networked form of economic units provides the necessary flexibility and adaptation to adjust to constant changes in demand, in technology, in process, and product, in an increasingly globalized economic environment. Networks make possible to bring together resources from different units, and focus these resources on one particular business project without losing flexibility, as it would be the case with gigantic firms organized along traditional standards of large-scale, vertical bureaucracies.

From Administration to Governance

The capacity to govern is one of the ongoing quests of humanity, but that capacity is not equally distributed in space or in time. Some countries in the world can go about the process of governing themselves with little conscious concern about their ability to do so. For the rest of the world governing is a more problematic consideration. Even for those countries that are confident about the capacity to govern, that confidence may in reality be complacency when viewed from a more detached perspective. This is in part because conceptions of “good governance” are culturally and historically contingent and what is functional in one political setting may be in many ways sub-optimal in other settings.

The attempts to reform public administration have been ubiquitous. Even when there have been manifest needs to consolidate democracy and to improve the functioning of the institutions of public participation there also has been a perceived need to put the functioning of the bureaucracy right. This emphasis on administrative reform is well placed given the centrality of administration in implementing programs, and its role as the principal contact between State and society. Citizens may encounter their elected representatives from time to time, but most citizens are in frequent contacts with members of the public bureaucracy, in the form of policemen, tax

officials, social service employees, teachers, and other like. Governance does require more than simply the capacity to implement efficiently and some wider conception of governing needs also to be considered when thinking of the capacity of governments to steer.

Governance can be defined most simply as the process of providing direction to society. Governance is often thought of in terms of “steering”, in which some set of actors (increasingly thought of as involving both public and private actors) attempts to use the instruments at their disposal to get the economy and society to act in a goal-seeking manner. Elements in the civil society can facilitate governance. At the input or design level the crucial activity for governance is adapting to changing environmental conditions and changing demands. Any effective government needs and demands that change constantly, and therefore must make decisions about how rapidly to respond, and conversely how much to emphasize stability of its policy responses. In order to be effective in making that response, governments must be open to inputs from the environment--both technical and political. Governments that choose to govern too much from the top down and lack good links with society are unlikely to be effective in responding to their environment. Such responses as it does make may appear to be groping rather than clear responses to the needs and demands coming from the environment.

Institutional Capacities in a Globalized Context

The greatest disparity between developed and less developed nations is no longer a matter of natural resources, or even of human capital (increasingly mobile as it is), but is the growing divide in access to organizational capacity and the extent to which this impedes the coordination and exploitation of informational resources. This organizational capacity is often directly associated with the ability to embody ICT within networked structures that can link government to economic and social development in new ways.

The webs of power and knowledge that these initiatives enact are often presented as being fundamental to the dynamics of technological, organizational, and social innovation in both developed and developing socio-economic contexts. Mobilizing technological capacity, the diffusion of networking and communication infrastructure, and the establishment of the internet

as the new platform for global communications (telephony, data and images, broadcasting) are often understood as central in this process. Indeed, ICT is often identified as a primary actor in enabling national and regional economies to develop new social and organizational capacity and exploit new knowledge assets. This, it is proposed, can then lead to a better ability to participate in the wider global economy and serves as a primary means to achieve social and economic development.

Typical challenges for developing countries include the creation of institutions in support of the new global and electronic markets as well as establishing an enabling policy environment that supports social inclusion and offers institutional transparency. This must be accomplished while building regimes for foreign investment and participation in global trade. Capacity and capacity building are critical for promoting good governance in any country. Good governance is a major factor in creating an environment of peace, stability and security in which people can pursue various productive and creative activities, creating wealth and employment and thus promoting human development and alleviating poverty. But good governance is a product of deliberate policies.

Good Governance through Electronic Governance

Two parallel evolutions are currently challenging the functioning and the legitimizing of the traditional nation-state: globalization and the rapid development of the information and communication technologies (ICTs). Both come together in the new concept of “electronic governance” or “e-governance.” E-governance is commonly defined as the application of *electronic means* in (1) the *interaction* between *government* and citizens and government and businesses, as well as (2) in internal *government operations* to simplify and improve democratic, government and business aspects of governance.

Objectives of the Study

1. To understand the organizational transformation required for e-governance processes
2. To study the technology management in administrative systems and technical competency among public officials
3. To assess institutional capacities and performance

4. To highlight political initiatives and bureaucratic leadership
5. To study the success or failure of e-governance programmes from both institutional and public perspectives
6. To assess the sustainability of e-governance programmes
7. To have a broader understanding of public trust and participation in e-governance

Framework

- 13 States and 27 e-governance programmes
- 2 to 3 districts covered in each state
- 3,146 respondents, including administrative staff and citizens
- Institutional perspective
- Citizen perspective
- Comparative analysis of projects

Key Areas of Study

1. Organizational transformation
2. Technical capacities of government institutions
3. Technology innovation and adaptation
4. Technical competency among staff
5. Training requirements
6. Sustainability
7. Interactive models
8. Quality of services
9. Financial sustainability of e-governance projects
10. Leadership and ownership of e-governance projects

Collection of data

1. Primary sources
2. Field studies
3. Interview schedules
4. Questionnaires (two frameworks)
5. Informal discussions
6. Secondary sources, including Govt. records, reports, databases, online journals, book and research reports

Period of study

May 2009 to September 2011

States Covered

Andhra Pradesh, Arunachal Pradesh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Punjab, Sikkim, Tamil Nadu and West Bengal

Type of e-governance projects covered

1. Citizen services – 13 projects in 10 states
2. Land Records Management – 9 projects in 9 states
3. E-district – 6 projects in 5 states

Major Findings

1. Early successes in e-governance have been sustained in the form of e-Seva, BangaloreOne, FRIENDS, Akshaya, Bhoomi, CARD and STAR
2. Since this study went further to include almost 8 more states in its second edition, more projects have been evaluated with emphasis on institutional capacities and performance
3. There is a major mismatch between pilot successes and subsequent failures in the form of Gyandoot, Warana and common service centres in North-East
4. Majority of the projects rolled out under NeGP could not sustain once central funding was stopped in 2007
5. Only a few state governments have allotted finances to consolidate e-governance projects
6. Sugam in H.P and e-city projects in Surat and Ahmedabad, land records management in H.P., Gujarat and Haryana are fledging with high standards of e-governance
7. Punjab is a slow starter. It has done BPR with front-offices (Suwidha centres) at the district and sub-divisional level. However, the user charges are very high
8. Madhya Pradesh has infrastructure in place, but public staff rarely offer e-governance services to common people
9. Technology proliferation has resulted in automation of many government agencies/institutions, but they are less enthusiastic in going online
10. Institutional capacities have also increased substantially, but that does not reflect in their performance regarding delivery of e-governance services

11. Success of major e-governance projects was on account of personal initiatives and consolidated by political support
12. e-Service delivery in our country is fragmented due to multiple entities. E-Governance initiatives in different departments are carried out independent of each other, which dilutes the overall impact.
13. Failure of some projects is also on this account, since a transfer or replacement of a top official or change in political regime impacts adversely on the sustainability of e-governance projects. Gyandoot, Warana, Thiruvarur, CSCs reflect this trend
14. Interoperability is the major issue. Only two states have achieved interoperability. Bhoomi and Kaveri in Karnataka and Akshaya and FRIENDs in Kerala are the success stories
15. Horizontal integration of e-governance has been achieved in many states in the form of SWAN, state portals and specific project websites. However, vertical integration is limited to only a few states like Kerala, Andhra Pradesh, Tamil Nadu, Karnataka and Gujarat
16. Majority of e-governance portals web content is in vernacular language
17. Many states do not have capacity building programmes in place. Public staff training requirements are very high.
18. Individual departments have different mechanisms of identifying the concerned end users from the same set of citizens. As a result, they are interacting with the same set of users independently multiple times. This is resulting in series of rework loops, duplication of efforts and non-value added works.
19. For a majority of citizen-centric e-gov projects, there is a need for process level reforms with strong backing of automated decision support mechanism
20. Interactive models have to be broadened to mobile technology so as to expand the outreach of e-governance services
21. Lack of internet penetration in the country is the major obstacle for expanding the outreach of online services

Limitations of the Study

1. Vast geographical area (study area)
2. Regional, cultural, social, ethno-linguistic barriers
3. Lack of universal application of e-governance projects
4. Not-so-responsive public staff and officials
5. Lack of access to critical information, especially on financial aspects of e-governance projects
6. Public-private partnerships vary in nature and size
7. Time and cost constraints for taking up this vast study

Areas for Further Research

1. Interoperability and integration of online services
2. Common portals for all government agencies/institutions
3. Flexible websites facilitating access to citizens in local language
4. Project evaluation in the backdrop of lessons learnt
5. Studies on the use of IT at the local governments level – city, municipality, panchayat
6. The possibility of a mobile government
7. Knowledge management information systems at state level
8. E-government and its viability in India