

INDIA: E-Readiness Assessment Report 2004

For States/Union Territories

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Foreword

India has made a mark across the world in IT Software Services, and more recently IT enabled Services and Business Process Outsourcing. This has helped transform the way others perceive India. At home, there is a growing awareness that the ICT sector, which contributes more than 3 per cent of the GDP (2002-03), has a vital role to play in economic development. But if the dynamism displayed by this vital sector is to be sustained, we must multiply these IT applications at home, in our industries, in rural areas and in governance.

Our first report 'India: E-Readiness Assessment 2003' was the first attempt at ranking the e-preparedness of States and Central Ministries. It received wide acclaim and was very well accepted. Building upon that experience in this second attempt, we look at new dimensions of e-readiness of States and Union Territories and bring forth the strong correlation between economic development and ICT. Econometric modeling has been used to identify the drivers of Information Technology in the country and state level prioritization of activities for the transformation using ICT.

India's national competitiveness has been studied and documented. The application of ICT to social sectors can improve governance and bring in better fiscal discipline in the provision of public services. In this report, case studies have been used as a tool to highlight the sustainability of e-governance initiatives. In keeping with the essence of second-generation reforms, we bring to light the importance of the involvement of the private sector in making rural development profitable.

The aim of this report is to provide valuable inputs to top-level decision makers in matters of resource allocation and policy formulation. It should also encourage various nodal ministries and departments to borrow or share best practices, put in place effective implementation mechanisms and move up in the realization of value from technology in tune with the opportunities provided. For the investor community at large, the report should act as a pointer to where the gap areas and opportunities lie.

The hard-working and committed team of the Department of Information Technology has worked closely with the National Council of Applied Economic Research (NCAER) to conduct this study. State governments and Union Territories willingly participated in the whole exercise, sharing their insights and field level experiences, which were used to supplement our primary survey in order to reflect the ground realities. Our future endeavors will greatly benefit from the feedback we hope to receive from our discerning readers.

Dayanidhi Maran
Minister
For Communications & Information Technology
Government of India

Date: September, 2004

Message

Information and Communication Technologies have contributed tremendously to the progress of nations over the past couple of decades. Breakthroughs in technology and innovative applications have brought vast benefit to certain sectors and sub-sectors of the economies of a number of countries. However, the achievement of sustainable competitiveness for an economy as a whole depends on the reach of these technologies and the ability of ICT to bring large sections of the population on to the “network”. Therefore, understanding and leveraging ICT is critical for nations striving for accelerated economic progress. Even in respect of social sectors, employment creation, betterment of social delivery system, e-governance, etc., ICT will increasingly play a vital role leading to a better quality of life.

Over the past few years, numerous attempts have been made to measure the comparative levels of ICT development of nations. The Global Information Technology Report, 2003-04, ranks India at 45th position. The report cites that the large pool of skilled manpower in India and the recent initiatives by the Central and state governments in getting the states/provinces e-ready as the main factors aiding India’s competitiveness. Even today, with one labour force growing at 2.4 per cent a year, the acceleration observed in the rate of growth in India comes primarily from improved labour productivity illustrating the vital role productivity plays in the economy.

In view of the above, this year’s E-Readiness report also focuses on the progress made in different States in the application of ICT in the social sectors leading to employment creation and hence a better quality of life. This report would help to establish the facts and perspectives from within India and would help crystallise the role of ICT in the economic development of the country. I am sure, this report will be discussed and analysed widely and thus help bring about awareness on how ICT can take our nation to still greater heights.

Dr. Shakeel Ahmed
Minister of State
For Communications and Information Technology
Government of India

Date: September, 2004

Preface

Information & Communication technologies hold the promise of sharpening the competitive edge of India Incorporated by increasing productivity across various sectors of the national economy. They can also help in bridging the gap between the providers of government services and their consumers and improving the certainty and quality of service delivery. The Governments, therefore, need to encourage the development of appropriate tools, technologies and applications for e-Governance services and build supportive infrastructures.

The assessment of e-Readiness and the formulation of national ICT strategies are complex exercises, which must address a variety of issues covering diverse elements such as infrastructure, applications, institutions, people, and policies. Carried out with a sense of purpose and a determination to use globalization as a lever for the social and economic development of the country, they can help bring about greater equity in the emerging Information Economy.

In this context, it becomes important to take stock of the state of e-readiness at the country level, State/UT level and in major verticals by appraising the status of the underlying infrastructure, human resources, policy regimes and investment climate at regular intervals. Such an exercise at the disaggregated level of territorial and functional units provides useful insights into strategic choices to optimize the investments made in the programmes for integrating information and communication technologies into government processes. The present report presents the conclusions of this effort in a structured manner.

The preparation of this report has, as in the past, been a collective endeavour of immense instructive value to those who have been associated with it. The models used, case studies discussed and outcomes brought out should also be of interest to academia, civil society and researchers, apart from decision-makers and implementers. Their comments and observations will be of great encouragement to the team and help it in its future efforts.

K. K. Jaswal
Secretary
Department of Information Technology
Ministry of Communications and Information Technology
Government of India

National E-Governance Action Plan - Assessment and Awareness

The Government of India has approved the National E-Governance Action Plan for implementation during the year 2003-2007. The Plan seeks to create Core Infrastructure and Policies required for the long-term growth of e-Government services and to implement a number of Mission Mode Projects to bring about a citizen-centric and business-centric environment. The initiative also envisages providing necessary guidance and assistance to the State Governments for implementing in parallel, a set of projects of national priority.

The Government of India's National E-Governance Action Plan entails significant financial outlays and involves both public and private investments. A significant portion of the plan relates to implementation of Core Mission projects at the Center and States. The level of e-readiness of the environment in which such projects are undertaken has an enormous bearing on the likelihood of success as well as the cost of each project.

In the above context, the assessment of e-readiness of states and central ministries has particular significance. The findings of last year's E-Readiness assessment report 2003, helped identify the gaps and strengths as well as the level of disparity within and across the States. Tamil Nadu set up a task force to review sub indices and areas where it could improve based on last year's inputs. Karnataka also set up new e-governance cells. Gujarat has shown aspirations to graduate to the leaders category. Sikkim and Himachal Pradesh put in place special committees to fulfil data requirements.

The findings of the last year's report also brought out the importance of leadership, connectivity, skilled manpower and e-preparedness of the society through the Case studies undertaken. These findings proved very significant while evolving the National E-Governance Action Plan. In fact, the National E-Governance Action Plan has a separate component on Awareness and Assessment to carry out assessment activities related to the Plan.

This year's report apart from bringing out the E-Readiness Index of all States and UTs, also brings to light through Case studies the importance of increased private sector participation in developmental activities and sustaining high growth through appropriate institutional mechanisms. We hope this report will enable decision-makers and investors at large to make the right decisions with regard to policy formulation and investments to foster healthy competition.

R. Chandrashekar
Joint Secretary, (E-Governance)
Department of Information Technology
Ministry of Communications and Information Technology
Government of India

Message from Mr. Suman Bery, Director General, NCAER

With the advent of liberalisation, almost all Indian states, which are the size of nations, are actively competing with each other to attract domestic and foreign investment through the provision of incentives, infrastructure and better governance which of late includes e-governance. Information Technology in the developed economy context is associated with capital deepening, increased labour productivity and spill over effects due to network externalities. In the developing country context, ICT is viewed as a tool to improve human capability, integrate marginalised sections of the society, modernise provision of services, reduce rent seeking activities due to increased transparency and process efficiency. Research on the new economy as well as ICT for e-governance and e-commerce have become important and relevant theme areas in today's context. NCAER has in the recent past analysed issues affecting the "New Economy" as well as comparative studies of IT clusters in India and abroad. The concept of IT clusters in Bangalore was one that countries all over wanted to replicate in their own backyards.

NCAER is pleased to be associated with this important research area and hopes to continue the association with the Department of Information Technology.

From the Editorial Desk

The Internet, the 'Information Highway' is turning out to be the infrastructure or 'infostructure' for the computer age. The Internet is the first marketing medium with a truly global reach. The Internet is a medium or crucible through which the global consumer is being reached by the Madhya Pradesh farmer through the medium of e-Choupal. The infostructure is already spreading the possibility of increased distant collaboration and offshoring, which has made Bangalore the international brand equity in today's computer age. Our cover depicts the farmer using the first marketing medium to reach the global consumer as well as in getting across his mandi price, while the Bangalore BPO shows the participation of urban youth.

As Mr. David Pearce Snyder opines that by 2010 we will be living in a truly global village and cyber space will be the town square. These days there is policy competition for direct investment for creation of infrastructure. We see that happening in the case of infostructure. We even toyed with the idea of renaming our report as the *India Infostructure Report*.

Despite the countrywide success and acceptance of the first report, we did not sit back on our laurels. Although the second such exercise, the entire process of putting together this report was an interesting experience. This report involved new methods of analysis of case studies and econometric models to prioritise activities of the states to enable them to transcend levels. We had virtual contributors apart from the primary data from states. E-readiness and State/National ICT strategies, carried out with a sense of purpose, helped facilitate this complex process. We decided that an analytical enquiry based on primary data is overdue. This study portrays a cross-sectional view of the impact in terms of not only the output (in terms of indicators) but also the outcome (in the form of case studies).

A lot has been done in one-year time from knitting together a multi-agency team, carrying out surveys across all states and central government ministries/departments through various steps of review and stake-holders' participation to bringing out this volume in print.

The exercise involved co-operation from the headquarters of ministries/departments as well as inclusion of the operational units at the field level or the public sector units or even further, vertical coverage.

We hope states would interact in the same way as before. If any state wishes to take up issues involved in the report, the team would be available for the same.

Acknowledgements

The comprehensive study of e-readiness within the specified time frame would not have been possible but for the cooperation of a number of people and organisations.

The Department of Information Technology team guided by Secretary, DIT, Shri. K.K. Jaswal and consisting of Shri. R. Chandrashekar, Joint Secretary, Shri. S. Ramakrishnan, Executive Director, CDAC and Ms. Renu Budhiraja, Director, have put in a great deal of effort to give this study a final shape.

The Department of Information Technology appreciates the valuable inputs and suggestions received from the IT Secretaries of Maharashtra, Andhra Pradesh, Tamil Nadu, West Bengal, Gujarat and Karnataka during the initial conceptualisation stage and the cooperation received from them and all other States/UTs in the course of the assessment exercise. Special thanks go out to Dr. N. Vijayaditya, Director General, NIC, Dr. B.K. Gairola, DDG, NIC, Dr. V.K. Dharmadhikari, Sr. Director, DIT and other members of the group who were presented the draft report for their valuable inputs.

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