



Comparison of Rankings

3.1 Introduction

For the past three years, States have been ranked according to their e-Readiness status. This yearly exercise has assumed importance over the years as the Government of India accords it considerable importance as a stock taking mechanism; to understand the situation regarding e-Readiness or preparedness of the States. The States have also realised the importance of the report, a fact reflected in the quality of data that has been forthcoming in the recent past. Availability of rankings for three years for States and Union Territories logically suggests a need for a comparison of the status of e-Readiness. A note of caution before we embark on such an exercise: The rankings are not strictly comparable, the Framework of Analysis has changed between 2003 and 2004. However, the rankings for 2004 and 2005 are directly comparable since the Framework of Analysis was exactly the same in the two years.

The Framework of Analysis used in 2004 and 2005 has evolved from our exercise in 2003, feedback received from the concerned States and Government departments, and in light of latest developments in the international arena regarding e-Readiness. In 2003, the e-Readiness Index was calculated based on the following six groups (sub-indices):

- Network Access
- Network Learning
- Network society
- Network Economy
- Network Policy
- e-Governance.

These groups in turn consisted of various sub-groups or indicators. The Networked Readiness Framework

2003-2004, however, used a framework that was different, in tune with the evolving methodology and feedback from participating states and experts. In 2004, therefore, we changed our framework to factor in the evolution and also for broad compatibility with the evolved system. This framework, described in detail in Chapter 2, has also been used because of its potential not only to evaluate a State's relative development and use of ICT but also to allow for a better understanding of a State's strengths and weaknesses with respect to ICT. As mentioned in the introductory chapter other frameworks lacked this virtue.

Even though the Framework was the same in 2004 and 2005, the number of variables included in the analysis has increased between the two years. Keeping these limitations in mind, this chapter starts with the comparison of rankings over the last few years. This should give us a fair idea about how the States have fared in the area of e-Readiness. Since the Framework of Analysis is similar for the years 2004 and 2005, a detailed comparison of the rankings of sub-indicators is also undertaken for these two years. This allows us to identify certain factors that have led to the change in ranking of a State relative to others. Finally, using this analysis, we attempt to identify key drivers of e-Readiness. States that have done poorly can concentrate on these factors to improve their e-Readiness.

3.2 Comparison of e-Readiness Rankings 2003-2005

Table 20 depicts the ranking of the States and Union Territories between the years 2003 and 2005.

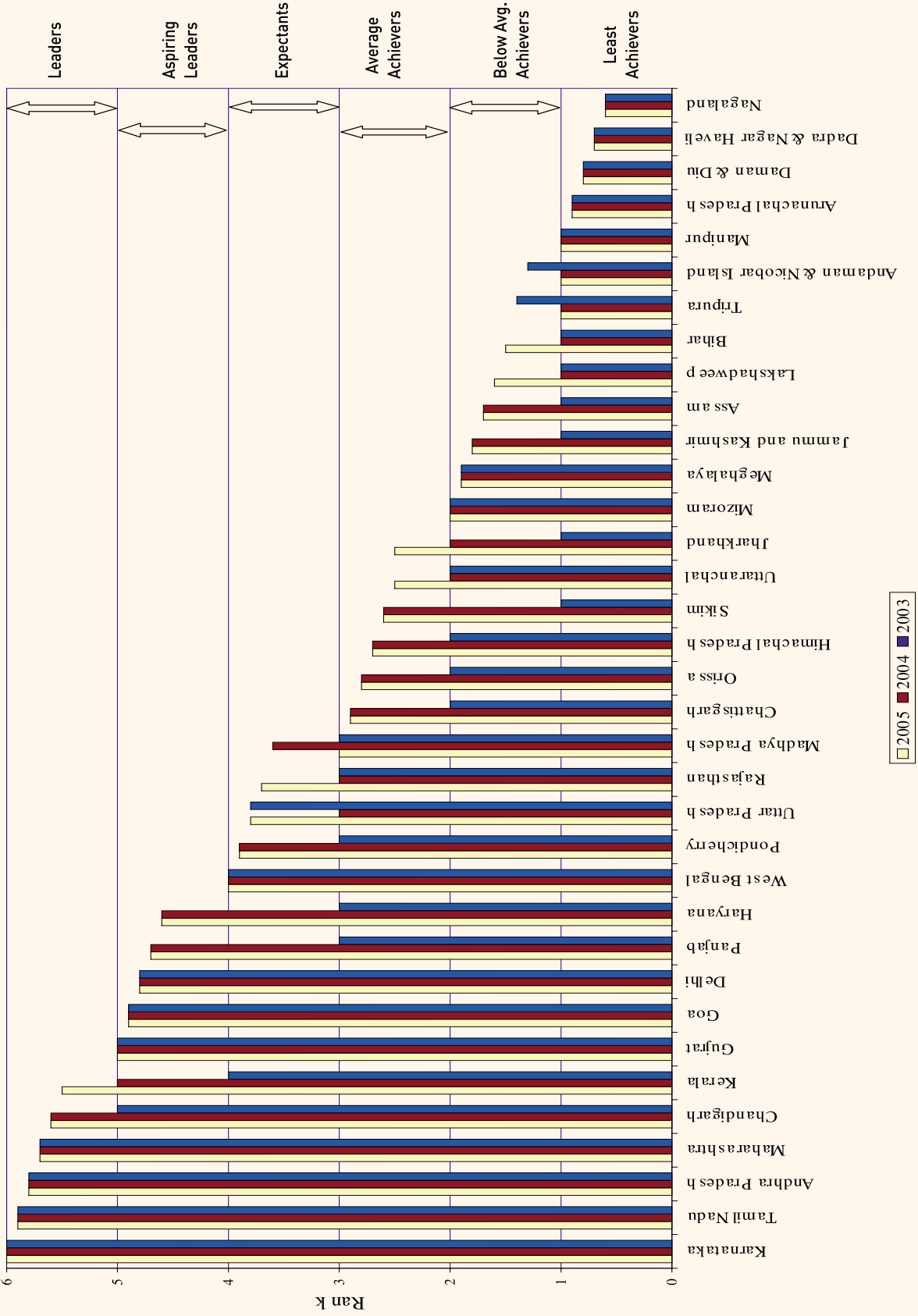


Table 20: E-Readiness Rankings

State & UT	2003	2004	2005
Andaman & Nicobar	24	31	31
Andhra Pradesh	4	3	1
Arunachal Pradesh	31	30	30
Assam	25	23	25
Bihar	28	32	28
Chandigarh	8	5	5
Chattisgarh	19	16	16
Dadra & Nagar Haveli	35	34	34
Daman & Diu	33	33	35
Delhi	7	9	8
Goa	6	8	10
Gujarat	5	7	11
Haryana	15	11	9
Himachal Pradesh	17	19	17
Jammu & Kashmir	29	22	27
Jharkhand	26	26	22
Karnataka	1	1	3
Kerala	11	6	4
Lakshadweep	27	27	26
Madhya Pradesh	12	14	21
Maharashtra	2	4	6
Manipur	34	28	29
Meghalaya	23	24	24
Mizoram	21	21	23
Nagaland	32	35	32
Orissa	20	17	20
Pondicherry	14	13	13
Punjab	13	10	7
Rajasthan	16	20	14
Sikkim	30	18	19
Tamil Nadu	3	2	2
Tripura	22	29	33
Uttar Pradesh	10	15	12
Uttaranchal	18	25	18
West Bengal	9	12	15



Comparison of Ranking of the States in different Years





As we can see from the above table, the southern and the northern States, along with Sikkim from the North-East, have done exceedingly well over the three-year period. Among the southern States, Andhra Pradesh and Kerala have done exceedingly well. Andhra Pradesh's ranking went from number 4 in 2003 to number 1 in 2005. Kerala had even a more dramatic improvement – from 11 to 4. In Andhra Pradesh, initiatives like Rajiv Internet Village (RAJiv) launched in 2004 seeks to provide a host of services to the rural populace through its 22,000 kiosks. The State Government has also taken proactive steps like attractive investment promotion policies. Due to these measures it is estimated that Andhra Pradesh would capture 33 per cent of the national IT and IT enabled services market by 2009. Andhra Pradesh has also done exceedingly well in the Environment and Readiness indicators.

Kerala has a lot of potential to harness the benefits of ICT. Availability of good technical manpower, requirement of fewer licences and recognition of software as an industry receiving all the benefits accorded to a priority industry and investment allowance, has made the State an attractive destination for investors. The Internet services at Kochi and Thiruvananthapuram, and Software Technology Park at Thiruvananthapuram with all world-class facilities provides excellent support especially for export oriented units.

Among the northern States, Haryana and Punjab have improved their rankings significantly, over the three-year period. As can be seen from Table 20, both Haryana and Punjab have climbed six places, between 2003 and 2005. Gurgaon in Haryana has been the IT destination in the North. Almost all big names in the IT sector have their presence in this town. The Government of Haryana has been proactive in having an IT Policy, Web Policy, a number of incentives to software firms and an e-Governance Policy to provide effective governance to business and people.

Punjab has ranked one, among the northern States in terms of over all performance of the States in the last two years. This is an indication of performance of the State in all spheres. The government of Punjab seeks, “to use Information Technology towards accelerated overall development of a knowledge rich society”. They have policies for private-public partnership (PPP), other than a separate IT Policy.

Sikkim has had a dramatic rise from 30 to 19 (Table 20) between 2003 and 2005. Forty Community Information Centres (CICs) have been set up across the remotest of regions in Sikkim. The Government uses IT in almost all its functions. Sikkim has among the highest IT usage across Indian States. A Software Technology Park providing higher bandwidth facilities to potential investors has been functional for the last six months.

Among the States showing a downward trend in e-Readiness rankings, Madhya Pradesh has significantly slid down nine places between 2003 and 2005. Most of the decline, however, was between 2004 and 2005 (7 places). Some reasons for this decline are discussed in the next section. Certain other States and Union Territories like Andaman & Nicobar Islands and Tripura show a downward trend in e-Readiness rankings but the significant change happened between 2003 and 2004 when the Framework of Analysis changed. Since there is no concrete mechanism to separate the factors that led to the change in rankings for this State and Union Territory due to poor performance and factors that affected the rankings due to the change in framework, these cases are not discussed.

3.3 Comparison of e-Readiness Rankings 2004 – 2005

Tables 21 through 23 depict the rankings of the States in terms of the Sub-Indices, Environment, Readiness and Usage.



Table 21: Comparison of Environment Sub-Index Rankings

States	Environment 2004	Environment 2005
Andaman & Nicobar	32	33
Andhra Pradesh	9	9
Arunachal Pradesh	30	32
Assam	23	25
Bihar	35	26
Chandigarh	1	1
Chattisgarh	11	15
Dadra & Nagar Haveli	31	34
Daman & Diu	34	35
Delhi	17	7
Goa	2	5
Gujarat	4	11
Haryana	7	6
Himachal Pradesh	24	16
Jammu & Kashmir	19	28
Jharkhand	25	22
Karnataka	12	10
Kerala	6	8
Lakshadweep	27	29
Madhya Pradesh	18	24
Maharashtra	8	2
Manipur	29	30
Meghalaya	22	20
Mizoram	21	23
Nagaland	33	27
Orissa	16	21
Pondicherry	10	12
Punjab	5	4
Rajasthan	26	18
Sikkim	14	14
Tamil Nadu	3	3
Tripura	28	31
Uttar Pradesh	15	13
Uttaranchal	20	19
West Bengal	13	17



Table 22: Comparison of Readiness Sub-Index Rankings

States	Readiness 2004	Readiness 2005
Andaman & Nicobar	33	33
Andhra Pradesh	1	1
Arunachal Pradesh	28	32
Assam	19	23
Bihar	32	29
Chandigarh	11	11
Chattisgarh	27	21
Dadra & Nagar Haveli	34	35
Daman & Diu	31	34
Delhi	3	15
Goa	13	19
Gujarat	7	20
Haryana	10	8
Himachal Pradesh	16	18
Jammu & Kashmir	24	22
Jharkhand	25	17
Karnataka	5	3
Kerala	6	4
Lakshadweep	26	9
Madhya Pradesh	12	10
Maharashtra	4	6
Manipur	29	27
Meghalaya	15	26
Mizoram	20	28
Nagaland	35	30
Orissa	17	12
Pondicherry	22	24
Punjab	8	5
Rajasthan	18	13
Sikkim	21	25
Tamil Nadu	2	2
Tripura	30	31
Uttar Pradesh	14	7
Uttaranchal	23	14
West Bengal	9	16



Table 23: Comparison of Usage Sub-Index Rankings

States	Usage 2004	Usage 2005
Andaman & Nicobar	26	26
Andhra Pradesh	5	9
Arunachal Pradesh	34	27
Assam	23	32
Bihar	24	33
Chandigarh	6	2
Chattisgarh	14	15
Dadra & Nagar Haveli	35	31
Daman & Diu	29	29
Delhi	9	1
Goa	29	12
Gujarat	9	7
Haryana	13	5
Himachal Pradesh	12	16
Jammu & Kashmir	3	28
Jharkhand	17	22
Karnataka	33	4
Kerala	21	3
Lakshadweep	1	21
Madhya Pradesh	2	25
Maharashtra	20	10
Manipur	15	30
Meghalaya	10	18
Mizoram	22	11
Nagaland	27	35
Orissa	18	24
Pondicherry	4	23
Punjab	7	8
Rajasthan	28	14
Sikkim	19	17
Tamil Nadu	8	6
Tripura	30	34
Uttar Pradesh	16	19
Uttaranchal	31	20
West Bengal	11	13



As we have already mentioned that comparison of rankings between 2004 and 2005 is more appropriate than the comparison between 2003 and the other years due to difference in the Framework of Analysis used in those years. In this section we take a closer look at the rankings in 2004 and 2005 since these are directly comparable. Therefore, we can go down to the level of Sub-Indices to isolate the factors responsible for significant shift in rankings.

Before comparing the 2004 and 2005 ranking of States, it might be instructive to look at the drivers of the leaders in improvement across the three years. Andhra Pradesh's performance in both Business and Individual Readiness are much better as compared to other States. Improvements in the Readiness and Usage indicators have helped Kerala climb up the ladder of e-Readiness rankings. In both these indicators the performance of Kerala in terms of individual and Government components has been better than other States. Haryana has done well in Environment and Usage indicators as compared to other northern States and Punjab has performed well in Political and Regulatory Environment and Individual Readiness Indicators. Among the North-Eastern States, Sikkim has done well in Political Regulatory and Infrastructure Environment Indicators.

While comparing the rankings for 2004 and 2005, it can be observed from Table 20 that the States of Bihar (up four places), Jharkhand (up four places), Rajasthan (up six places) and Uttaranchal (up seven places) are the States which have significantly improved their positions between the two years. On the other hand, Jammu & Kashmir (down five places) and Madhya Pradesh (down seven places) have declined significantly during the same period. In order to find plausible factors behind such changes we need to probe deeper and go to the level of Sub-Indices.

Bihar has significantly improved in indicators representing Market and Infrastructure Environments and Readiness of both the Business and Individual varieties

in 2005 over 2004. Jharkhand, on the other hand, has done exceedingly well and had improved its ranking through good performance in Political, Regulatory and Infrastructure Environment Indicators as well as Readiness on the part of Government and the Individual. Rajasthan, which is performing well in terms of income growth and poverty alleviation in the past few years, has significantly improved its ranking in 2005 over 2004. The factors responsible for such changes are Political and Regulatory and Infrastructure Environment indicators, Government Readiness Indicators and Individual and Government Usage indicators. Uttaranchal, the State with the greatest improvement in ranking between 2004 and 2005, has done well in Political and Regulatory and Market Environment Indicators, Government and Individual Readiness Indicators and Business and Government Usage Indicators. It is clear that Political and Regulatory, Government Readiness and Government Usage are indicators that have helped most of these States to improve their rankings in terms of e-Readiness between 2004 and 2005.

Among the States who have moved down the e-Readiness rankings, Jammu & Kashmir has performed poorly in Infrastructure and Market Environment Indicators, Business Readiness Indicators and Government Usage Indicators. Madhya Pradesh, on the other hand, has done poorly in Infrastructure and Market Environment Indicators and Individual Readiness and Usage Indicators. Once again, Infrastructure and Political and Regulatory Environment Indicators, Business Readiness Indicators and Government and Individual Usage are the indicators, which have caused the downfall of most of these States.

3.4 Conclusion

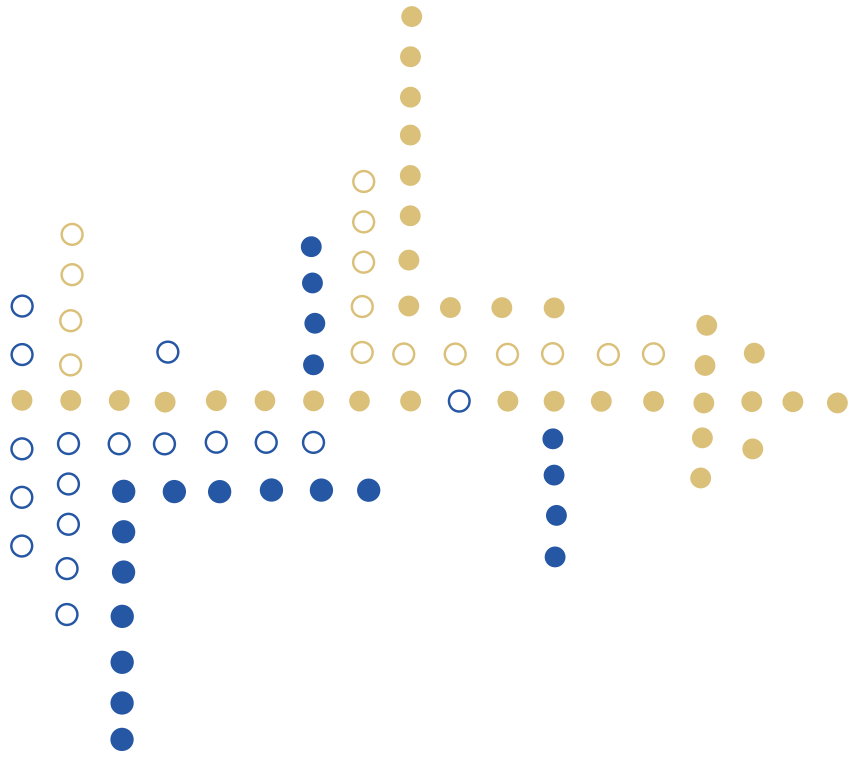
The comparison of e-Readiness rankings throws up some important lessons regarding indicators that have caused significant change in rankings of the States and UTs. Political and Regulatory Environment emerges as a significant variable in determining changes in State rankings. This indicator was responsible for improvement



for the States that have done well. It was the chief cause for the others to fall behind.

The analysis in Chapter 2 indicates that policies undertaken for better e-Governance, incentives to IT companies and security policies are significant indicators affecting the political and regulatory atmosphere across States. Thus, States lagging behind should concentrate on quick formulation and efficient implementation of such policies. Government Usage is another factor that turns out to be extremely important. Other significant factors

that emerge from the analysis in Chapter 2 are status of accessibility of information and services by citizens; policies taken for ICT usage and, number of e-Governance projects undertaken. Again, the States lagging behind should concentrate on these indicators to improve their e-Readiness vis-à-vis the others. Thus, apart from other factors, policies to enhance e-Readiness emerge as an important factor in explaining the change in rankings of the States. Thus, their Governments should actively formulate policies and implement them in order to increase e-Readiness.



Analysis of Case Studies

