Assessing e-readiness of firms in India

ICT adoption by firms in all regions could enhance effectiveness of programmes such as Digital India

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The National Council of Applied Economic Research (NCAER) together with the Department of Electronics and Information Technology has assessed the e-readiness of states and Union Territories of India six times since 2003. This body of work defines e-readiness as the ability to pursue value-creation opportunities for inclusive economic development facilitated by information and communications technology (ICT).

The NCAER e-Readiness Framework includes three stakeholder groups — individuals, businesses and government — and consists of three components — environment, readiness and usage. The environment component comprises the market, political, regulatory and infrastructure environment. Readiness assesses the ability to use and produce ICT/ICT-enabled goods and services by the three stakeholders. Lastly, given the environment and readiness, usage covers the extent to which the stakeholders actually use ICT-enabled goods and services.

Economic intuition would say that businesses would be ahead of individuals and the government in creating a conducive environment and hiring or training a labour force that knows how to use and produce ICT/ICT-enabled goods and services. However, this information is not always readily available or is only available at significant lags. To fill this gap, we conducted a perception-based analysis of business e-readiness under the Business Expectations Survey (BES) framework in six major cities.

The NCAER has been conducting the BES every quarter since 1991. It tracks the business sentiments of over 500 Indian companies to compute the composite Business Confidence Index. The survey elicits responses from firms/industries spread across regions (Delhi NCR representing the north, Mumbai and Pune the west, Kolkata the east, and Bengaluru and Chennai the south). The BES conducted in September 2016 included a survey about ICT readiness of firms.

In the environment section, we assess the presence of a well-established ICT policy and available infrastructure within the firms. The presence of ICT policy provides dynamism to the ICT infrastructure of companies. The southern region leads the way in this parameter. Continuous electricity supply is a prerequisite for ICT implementation and power back-up serves the purpose of overcoming any deficit in that infrastructure. More firms in the northern and southern regions have power back-up. A smaller percentage of firms located in the western and northern regions view the ICT infrastructure in their company as good. Overall, the survey indicates that the ICT environment of the firms in the southern region outperforms other regions.

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In the ICT readiness category, we assess the preparedness of firms in terms of being able to use ICT. Questions were asked about the presence of either the IT department or manager, use of various operating software like MS Office and Enterprise Resource Planning; if computer literacy is a prerequisite for hiring at various levels; and if ICT training is imparted to employees at regular intervals. The presence of either an IT department or a dedicated IT manager is maximum in the western region. As much as 82.9 per cent of the firms use one or the other operating system with a relatively limited regional variation. Only 62.5 per cent of the firms responded positively regarding computer literacy as a prerequisite for hiring managerial workers. The western and southern regions particularly stand out. Regarding imparting ICT training to employees of various types, results are similar to the previous parameter. Despite not having the best ICT environment, the western region exhibits a higher degree of readiness with a dedicated IT manager/department, use of software, hiring computer-literate managers, and imparting ICT training to employees.

Lastly, we ask firms whether they are using ICT in various activities. A majority of firms use ICT in their finance and accounting operations. More than 60 per cent of the firms use ICT in sales,
marketing and public relations. The percentages of firms using ICT in HR, administration, production and supply chain management stand at 54.4 per cent, 50.8 per cent and 57.1 per cent respectively. Overall, in usage, firms located in the western region are at one end of the spectrum compared to firms in the east.

The survey indicates that firms in the western region are more e-ready relative to other regions, followed by the south.

It also indicates that there is a tremendous scope for firms to use ICT in their various activities to improve their productivity. The effectiveness of various key government programmes such as Digital India and Make in India may be enhanced if ICT is adopted by firms in all regions of the country. There is an acute need to assess business e-readiness of firms on a more continuous basis and in a comprehensive manner, which may give key policy insights to all stakeholders.

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