

e-Readiness of Selected Central Ministries/Departments

5.1 Introduction

The performance of Central Government Ministries is relevant since one of the major purposes of e-Readiness is to strengthen e-Governance. The Government of India accords high priority to the area of e-Governance. Accordingly, a National e-Governance Plan (NeGP) has been drawn which seeks to implement a number of Mission Mode Projects at the centre, state and integrated service levels so as to create a citizen-centric and business-centric environment for governance, create the right governance and institutional mechanisms, set up core infrastructure, formulate key policies and channelise private sector technical and financial resources into national e-Governance efforts.

e-Governance is crucial to promote public accountability and delivery of responsive services. The term e-Governance often has different connotations:

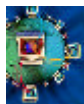
- e-Administration—the use of ICTs to modernize the state; the creation of data repositories for information services, computerisation of records.
- e-Services—the emphasis here is to bring the state closer to the citizens. Examples include provision of online services. e-Administration and e-Services together constitute what is generally termed e-Government.
- e-Democracy—the use of IT to facilitate the ability of all sections of society to participate in the governance of the state. The canvas is much broader here with a stated emphasis on transparency, accountability and participation. Examples could include online disclosure

policies, online grievance redress forums and e-Referendums.

5.2 e-Governance in India

e-Governance originated in India during the seventies with a focus on in-house government applications in the areas of defense, economic monitoring, planning and the deployment of ICT to manage data intensive functions related to elections, census, tax administration etc. The efforts of the National Informatics Center (NIC) to connect all the district headquarters during the eighties was a significant milestone in this respect. From the early nineties, e-Governance has seen the use of IT for wider sectoral applications with policy emphasis on reaching out to rural areas and taking greater inputs from NGOs and the private sector. There has been an increasing involvement of international donor agencies such as DFID, G-8, UNDP, and the World Bank under the framework of e-Governance for development.

While the emphasis has been primarily on automation and computerization, state endeavours to use IT include forays into connectivity, networking, setting up systems for processing information and delivering services. At a micro level, this has ranged from IT automation in individual departments, electronic file handling, access to entitlements, public grievance systems, service delivery for high volume routine transactions such as payment of bills, tax dues to meeting poverty alleviation goals through the promotion of entrepreneurial models and provision of market information. The thrust has varied across initiatives, with some focusing on enabling the citizen-state interface for various government services, and others focusing on bettering livelihoods.



5.3 Focus, Data-base and Framework of Analysis

After evaluating and ranking states according to their e-Readiness, this chapter intends to take the report one step further by analysing the e-Readiness performance of certain central ministries or sub-ministries. The objective of this chapter is to evaluate nine selected ministries in terms of their performance in the sub-components of e-Readiness. Ministries with direct interactions with the public have been chosen in order to analyse the extent to which the central government is applying ICT techniques to improve the quality and quantity of its services. The framework through which states were evaluated has been applied to the different ministries as well. This includes an analysis of the environment, readiness and usage of ICT in the ministries. Unlike states however, ministries are not comparable since each ministry has a different *raison d'être*. The extent to which the ministries/departments can go in promoting ICT depends on the nature of their responsibilities and services. There is therefore no common threshold by which we can compare the ministries. This incomparability means that ministries cannot be ranked in order of e-Readiness, they can only be judged according to the applicability of ICT to their work and the efforts they invest to achieve it.

The database for this analysis is a structured questionnaire canvassed in the selected ministries. However, the data provided by the respective ministries, unlike that of the states, cannot be quantified for two reasons. First, the sample of ministries is too small to do any meaningful statistical analysis. Second, although the questionnaire used was common to all ministries, the responses are not comparable because of their patchy nature. These constraints mean that the assessment of the e-Readiness of the ministries considered will be purely qualitative.

The Ministries/Departments selected for our analyses are:

- Ministry of Corporate Affairs (MCA)
- Ministry of External Affairs (MEA)
- Council of Passports and Visas, Ministry of External Affairs (CPV)
- Central Board of Excise and Customs, Ministry of Finance (CBEC)

- Central Board of Direct Tax, Ministry of Finance (CBDT)
- Directorate General of Foreign Trade, Ministry of Commerce and Industry (DGFT)
- Directorate General of Supply Division, Department of Commerce, Ministry of Commerce and Industry (DGSD)
- Department of Pension & Pensioners Welfare, Ministry of Personnel, Public Grievance & Pensions (DPPW)
- e-Committee, Department of Law and Justice, Ministry of Law and Justice (DLJ)

5.4 Limitations

1. Since only nine ministries have been taken, no quantitative analysis can be done.
2. The response to the questionnaires were not complete, thus a lot of the aspects that we planned to cover at the initial stages was not possible.
3. Strictly speaking, the performances of different Ministries are not comparable, as their functions and applicability of ICT in their functions are different. Thus we have not worked out a relative ranking of the Ministries and have done a qualitative analysis of different aspects of e-Readiness.
4. Lastly, since we are looking specifically at delivery of services, a better framework would have been to survey users of the e-Services under consideration. This is something that can be taken up in subsequent years.

5.5 Profile of Selected Ministries/Departments

Despite the differences in applicability of IT to each ministry/department, there are some levels of IT application that is common to all. These include the use of ICT for internal communications and administration as well as having a website that displays the principal purpose of the ministry/department. Once this level is achieved, some ministries can go further than others in using ICT to improve and facilitate the level of services provided. The following section attempts to shed light on the applicability of ICT to the ministry/department and to analyse the efforts conducted in this respect.



5.5.1 Ministry of Corporate Affairs

This ministry's main responsibility is to ensure the smooth application of legislative Acts, in particular the 1956 Companies Act. This involves providing a legal framework in which the Acts can be implemented and enforced. The Ministry of Corporate Affairs also ensures that the legislative initiatives are responsive to the changing business environment. In all aspects, besides those that involve the study, application and creation of the law itself, ICT can be applied to make processes faster and more transparent. Where applicable, the ministry has made efforts at increasing ICT applications to the extent that in 2005-2006, the ministry went from using IT only for some office applications to automating most processes and integrating some into a centralised system. This is evident from the Ministry's website, which not only provides all necessary information regarding the legal framework for businesses, but has also made available several administrative forms for downloading. The ministry has furthermore initiated the MCA21 e-Governance project whereby registration of companies can be done entirely through the official website.

5.5.2 Ministry of External Affairs

The responsibilities of the ministry of external affairs are much broader. This ministry manages all relations between India and the rest of the world. The benefits of applying greater ICT applications to its daily functioning include all advantages gained from the availability of the latest information in terms of decision and policy making; effectively processing, recording and retrieving information by installing an information management system; the reduction of duplications in efforts by streamlining all administrative processes; and keeping all departments well informed about each other's activities so as to improve efficiency. Even though efforts have been made to apply IT for all these purposes notably in the 10th and 11th Plan documents, the ministry admitted to only using IT for some office applications. The current ministry website is limited to providing information, which is not up to date. There is, therefore, a large scope for improvement as the information provided can be more regularly updated and more processes can be automated to the benefit of both the ministry and the public. Certain departments of this ministry, however, have used IT to a greater degree such as the consular, passport & visa division.

5.5.3 Consular, Passport and Visa division, Ministry of External Affairs

This sub division of the Ministry of external affairs manages all passport-related issues and therefore has a particularly intense interaction with the public. Its aim regarding ICT is to design a model passport office, which would issue passports expeditiously by using the latest technology. It also aims to issue passports that can be read by machines in all Indian Missions/Posts abroad and eventually, introduce the e-Passport. The division has already automated most processes and integrated a few into a centralised system. ICT has been specifically targeted in the 10th Plan document and no budgetary restriction is given in the 11th Plan. Its website provides all relevant information and forms and allows for online registration for passports. This has greatly facilitated the application process for a passport/visa.

5.5.4 Directorate of Systems and Data Management, Central Board of Excise and Customs, Department of Revenue, Ministry of Finance

The Directorate of Systems and Data Management (DSDM) of the Central Board of Excise and Customs (CBEC) is involved in the management of all centrally deployed CBEC computer facilities and designs, develops, tests, implements and maintains the CBEC's automated systems and IT related projects. The aim of this subdivision is to enable the CBEC and its clients to benefit from all possible advantages that increased use of ICT can bring. It seeks to provide an e-Interface for taxpayers and to promote transparency, accountability and optimal service delivery standards. According to the DSDM, most processes in CBEC are automated and some are integrated into a central system. No provision for ICT was included in the 10th or 11th Plan documents but despite that, improvements in IT have been considerable. All planned IT applications such as the strengthening of IT capability for e-Governance or developing a workflow based automated process for serving business needs were completed satisfactorily except for one. The aim of providing an e-Interface for taxpayers and a platform for taxpayer services was not applied as originally planned. The website however does make available all relevant information on customs, service tax and excise and even administers e-Payments.



5.5.5 Central Board of Direct Tax, Ministry of Finance

The Central Board of Direct Tax (CBDT) manages the levy and collection of direct taxes. ICT, if put to full use could enable taxpayers to meet their tax obligations without visiting the Income tax office. It is currently used to make revenue collection and tax administration more efficient, to improve the quality of services to taxpayers, and to increase compliance. Between 2003 and 2006, the CBDT has gone from using IT only for a few office applications to automating most processes and incorporating them in a centralised system. This development though laudable still leaves room for improvement if enabling taxpayers to fill forms and settle tax issues over Internet is to be achieved.

5.5.6 Directorate General of Foreign Trade, Ministry of Commerce and Industry

The Directorate General of Foreign Trade (DGFT) administers all trade related issues. Since 2003, the DGFT claims to have automated most of its processes and integrated them into a central system. Currently, IT is being applied in the management of trade in gems and jewelry, special economic zones, import authorisations and export oriented units. e-Trade and e-Procurement projects have also been initiated. These applications however, are linked more to the internal functioning of the department rather than its interface with the public.

5.5.7 Directorate General of Supply Division, Department of Commerce, Ministry of Commerce and Industry

The Directorate General of Supply Division (DGSD) of the Department of Commerce is responsible for providing supply and inspection services to Central Government Departments. ICT in this department enables increased transparency and efficiency in procurement, availability of infrastructure and accessibility to information in all states. It will also facilitate the redressal of grievances and lead to minimum interaction between suppliers, officials and the authorities. The DGSD has currently applied IT to some advanced operations and automated most processes. It has also successfully implemented the planned IT development initiatives to those fields that were most likely to benefit from them. These fields include the pre-dispatch

inspection of stores, the policy and procedure on procurement, the conclusion of contracts etc. The department's website is furthermore very elaborate in the information provided.

5.5.8 Department of Pension & Pensioners Welfare, Ministry of Personnel, Public Grievance & Pensions

The Department of Pension and Pensioners Welfare (DPPF) is responsible for formulating all policies regarding the Pension of Central (civil) pensioners and the framing of rules there under. It also provides information on retirement-related matters and guidance to pensioners. Besides improved transparency and efficiency, by implementing IT, the DPPF hopes to address certain problems such as the redressal of grievances by forwarding them to the respective Ministries/Departments concerned and following them up. IT will also enable coordination with the Ministry of Health and Family Welfare (Department of Health) for medical assistance to pensioners on the basis of schemes administered by the Department of Health. Despite being applicable to all thrust areas, IT has only been implemented to disseminate information about the retirement schemes and to provide guidance to pensioners. Plans are in place to extend IT application but they have not been implemented as yet. No provision for IT development was included in the 10th or 11th Plan documents. As of now, IT is only used for some office functions and the website is merely informative. There is therefore, a large scope for further improvement.

5.5.9 e-Committee, Department of Law and Justice, Ministry of Law and Justice

The purpose of the e-Committee of the Department of Law and Justice is to implement ICT in the Indian Judiciary system with the objective of providing speedy, cost effective, transparent and accountable justice. Similar to the DSDM of the Central Board of Excise and Customs, studying the applicability of IT to this sub-department is not relevant since its objective is the promotion of IT in the Judicial system – evaluating the efforts of this committee is a more pertinent exercise. Although a provision for IT promotion was included in the 10th and 11th Plan documents, the Department of Law and Justice is less advanced in terms of IT utilisation than most other ministries or departments studied here.



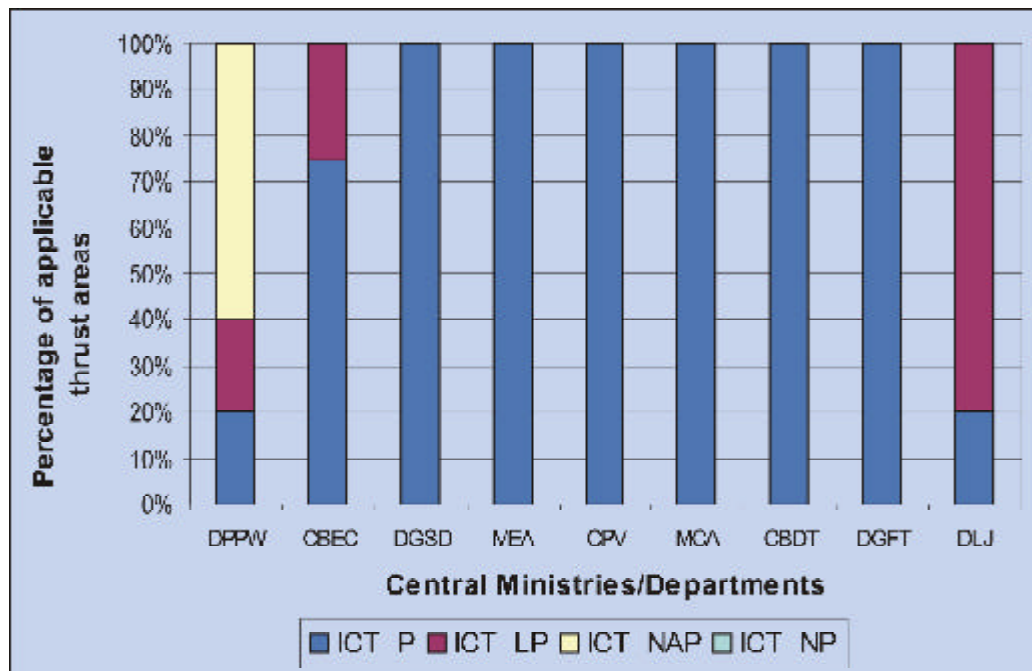
It currently uses IT for only some office functions and reached this level of IT dissemination only in 2005-2006. In the past, IT was only used in certain locations. The website of the Ministry was constructed in July 2007. The website will soon be made available in 11 languages, which is significantly more advanced than any of the above ministries/departments who provide all information in just English and Hindi. Laptops have recently been given to 12500 judges and training sessions for the judges and other employees is being carried out. Though late to start, if the e-Committee continues its current efforts, the Department of Law and Justice might soon become one of the best IT equipped departments.

5.6 e-Readiness in Ministries

5.6.1 Environment

Planning is an important part of creating an enabling environment for e-Readiness. It has already been mentioned that the Ministries are not comparable in terms of either the functions that they have to perform, or in the degree of applicability of ICT to those functions. However, we have attempted a comparison in terms of how much ICT application has been implemented as per the plan of the respective Ministry/ Department.

Figure 5.1: Pattern of application of ICT in ICT applicable thrust areas



- Notes: ICT_P Proportion of ICT applicable thrust areas where ICT is applied as planned
 ICT_LP Proportion of ICT applicable thrust areas where ICT is applied as less than planned
 ICT_NAP Proportion of ICT applicable thrust areas where no application of ICT through planned
 ICT_NP Proportion of ICT applicable thrust areas where no plan of ICT application

Except for DPPW, there is no other selected Ministry/ Department where application plans have not been implemented. DPPW in fact has performed particularly badly among the selected Ministries, since 60 per cent of its functions are in this category. DLJ is second from the bottom in terms of performance in this regard as for 80 per cent of its functions, the ICT implementation is less than planned; DLJ is followed by CBEC, where in 26 per cent of activities, ICT has been applied less than planned. However, majority of the selected Ministries have attempted to apply ICT in most of the functions as planned.



Table 5.1: Selected Parameter of Regulatory Environment in Ministries/ Departments

Ministry/ Department	Whether Action plan regarding e-Readiness was included in 10th Plan document	Whether Action plan regarding e-Readiness was included in 11th Plan document	Whether cyber laws meet requirements of the Ministry	Whether digital signature and encryption laws meet requirements of the Ministry
DPPW	0	0	0	0
CBEC	0	0	1	1
DGSD	1	1	1	1
MEA	1	1	0	0
CPV	1	1	1	1
MCA	0	0	1	1
CBDT	NA	NA	NA	NA
DGFT	0	0	1	1
DLJ	1	1	NA	NA

Note: NA: No response; (yes=1, no=0).

It can be observed from Table 5.1 that there is no difference in the 10th and 11th Plans regarding the inclusion of an e-Readiness action plan. In other words, the ministries/departments, which did not have an action plan for e-Readiness, did not plan to have one in the 11th Plan either. These ministries are DPPW, CBEC, MCA and DGFT. Out of these MCA and DGFT had applied ICT as planned in all its functions. Without proper e-Readiness action plan, there may have been adhocism in terms of ICT application within these ministries. Finally, There was no response from any Ministry regarding use of ICT in their fiscal environment.

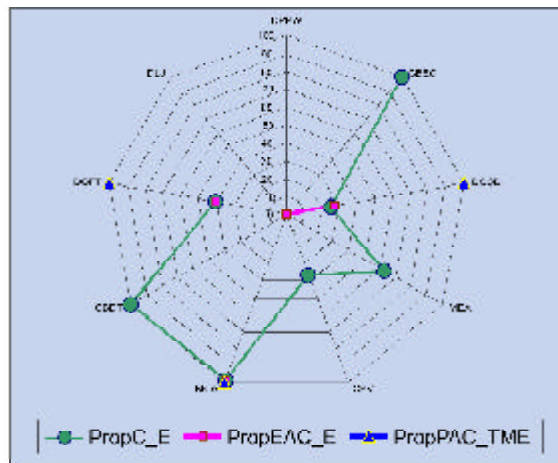
5.6.2 Readiness and Usage

Here, readiness includes two components -infrastructure readiness and human resource readiness - within the Ministry/ Department.

5.6.2.1 Infrastructure Readiness

As can be observed from the profile of the ministries, this is thought to be an important component of e-Readiness within several ministries/departments.

Figure 5.2: Accessibility of Computers in the Different Ministries/Departments



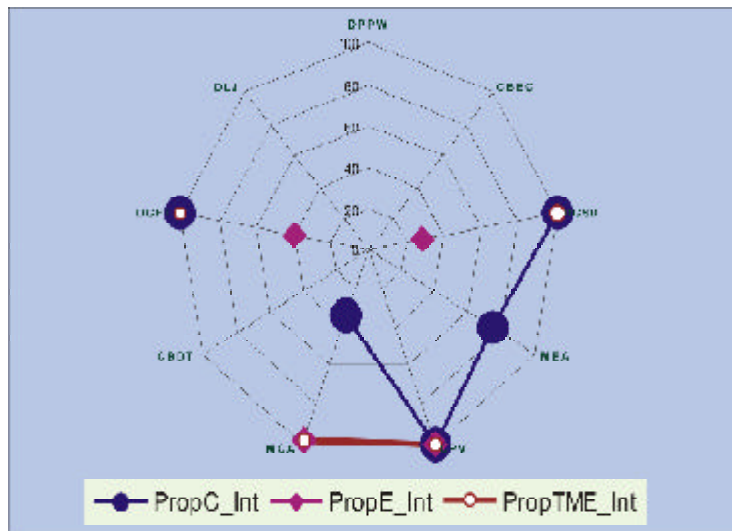
Notes :
 PropC_E: Proportion of computers to total employees
 PropEAC_E: Proportion of employees who have access to computers
 PropPAC_TME: Proportion of top and middle level employees who have personal access to computers

Fig. 5.2 makes an important revelation. Though of the ministries that have responded to this question, there are three (CBDT, MCA and CBEC) where the number of computers is equal to the number of employees, none of them have responded to the question of whether general employees have access to computers. Though in DGFT and DGSD, the coverage of computer per employee is less than 45 per cent, in these departments these are distributed efficiently, in the sense that there is hardly any difference in the availability and access figures. In these departments, however, all the middle and top level employees have access to computers, which is understandable. Thus, access to computers to all employees is an issue that needs to be sorted out. If e-Governance

has to be effective, particularly the G2E component, access to computers for all employees is essential.

The non-response regarding internet facility among the selected ministries is high. Among the ones that have responded, CPV has reported 100 per cent for all three variables (Fig. 5.3). For MCA, though access is not a problem, internet availability is restricted to less than 40 per cent of the computers. In DGFT and DGSD, internet access follows access to computers. This could mean that sharing of computers in say, a computer laboratory, given restricted infrastructure is not probably practiced for better access.

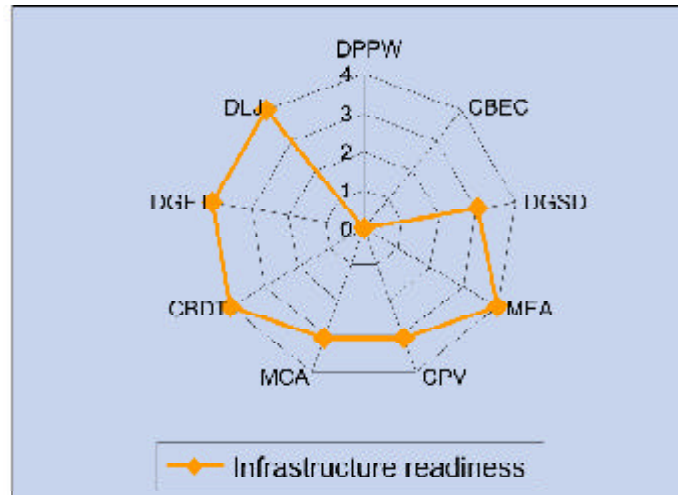
Figure 5.3: Availability and Accessibility of Internet Facility



- Notes :
- PropC_Int proportion of computers with internet facility
 - PropE_Int proportion of employees who have access to internet facility
 - PropTME_Int proportion of top and middle level employees who have personal access to internet facility



Figure 5.4: Availability of Selected Infrastructure within the Ministries



Notes: 1= Only Intranet is available; 2= Intranet and Video Conferencing facility available
 3= Intranet and e-readiness promotion cell exist; 4= All of three exist

As far as some of the IT related infrastructure and institutions are concerned (intranet, video-conferencing and e-Readiness cell) four of the selected Ministries, i.e., DLJ, DGFT, CBRD and MEA were the best equipped. DPPW and CBEC are the worst-off, since they did not have any of the infrastructure/institution considered.

It is clear from Fig 5.5, that construction of a website is the first initiative undertaken by most of the responding

Ministries, followed by internet. Intranet is a much more recent phenomenon, for a few of the Ministries have reported non-availability. This is a problem that has to be sorted out. Without intranet sharing, formalizing use of digital signatures or for that matter various aspects of G2E e-Governance cannot be effectively implemented. Also, IT related resource sharing is one aspect that will remain neglected till there is efficient use of the intranet.

Figure 5.5: Temporal Profile of Internet, Intranet and Website Availability in the Ministries

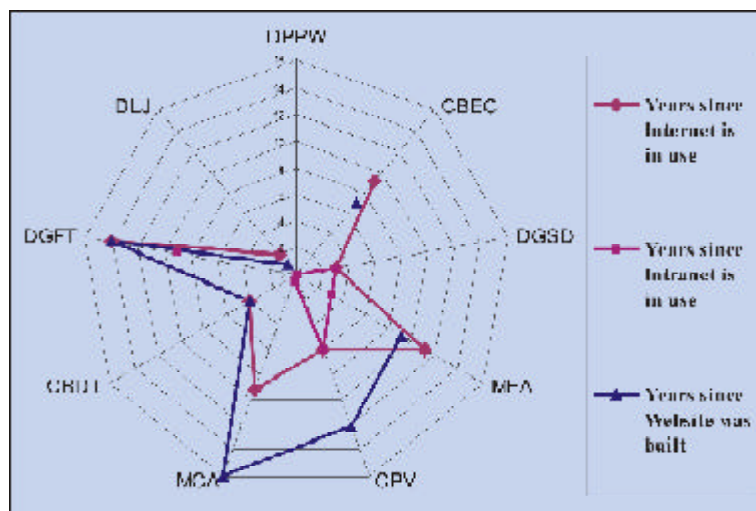
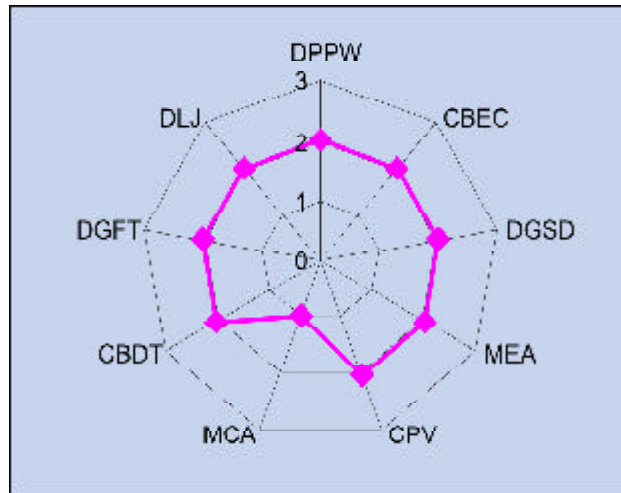




Figure 5.6: Use of Local Languages in the Website



Notes: 0= No website; 1= website in English only; 2= website in English and Hindi; 3= website in English, Hindi and any other local language

Though existence of websites is fairly common, most of the selected ministries have their websites in only English and Hindi (Fig 5.6). None of the other local languages are represented in any of the websites. In fact, MCA does not even have a Hindi website. India is a multi-lingual nation and has 22 scheduled languages. The focus on Hindi could possibly restrict the outreach of e-Governance to citizens of the Indo-gangetic belt.

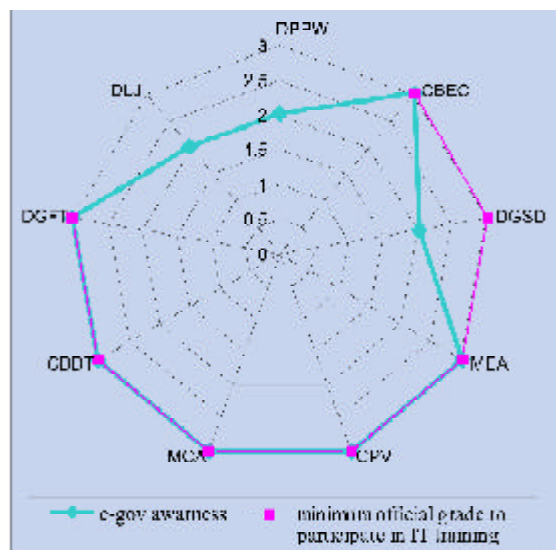
5.6.2.2 Human Resource Readiness

Human resource readiness is one of the most important aspects of e-Readiness. In spite of infrastructure

readiness, if there is no capacity-building among the employees as well as citizens to adopt ICT, the investment to create the infrastructure would be ineffective.

Figure 5.7 reveals that among the responding ministries IT training is not restricted among the top or middle grades — even the lower level clerks can participate in the training programmes. This, however, reveals little about the nature of the training conducted. This was another area where we got very little response from the ministries under consideration.

Figure 5.7: Awareness and Grade Required for Participating in IT Training



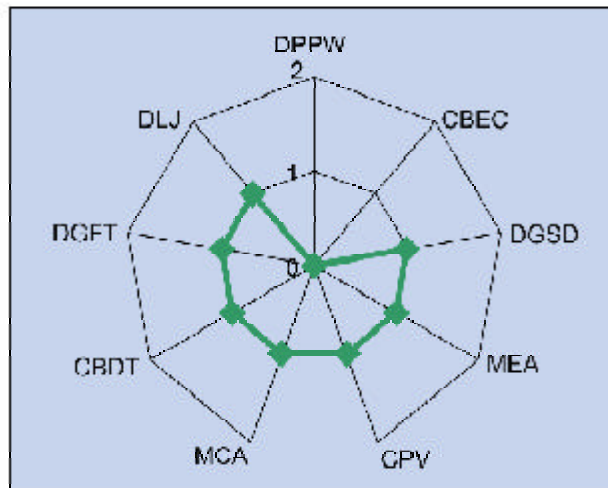
Notes: 1= Restricted to top level; 2= upto middle level; 3= upto lower level



However, the response that there is no restriction in terms of participation in IT training programmes is somewhat inconsistent with the response regarding awareness regarding e-Governance. At least three departments (DLJ, DGSD and DPPW) respond that the awareness is

restricted only to the middle level. Thus, though technically, there may be no restriction for participation in IT training programmes, there are indications that the lower level employees may not have been nominated to do so.

Figure 5.8: Existence of Performance Evaluation of e-Readiness

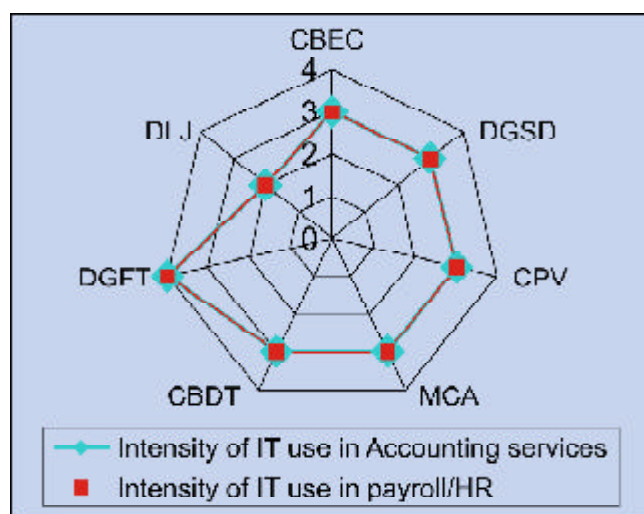


- Notes :
- 0= No special cell to promote e-Readiness
 - 1= Special Cell to promote e-Readiness exists but IT performance evaluation system does not exist
 - 2= Both a special Cell to promote e-Readiness and an IT performance evaluation system exist

Though in majority of the ministries, there is an existence of e-Readiness cell, in none of them there is a performance evaluation system. Thus, within the central Government system, though there are steps being taken

in terms of creation of institutions and infrastructure, systems that evaluate their optimal usage or efficiency are not in place (Figure 5.8).

Figure 5.9: Application of IT in Selected Human Resource Services

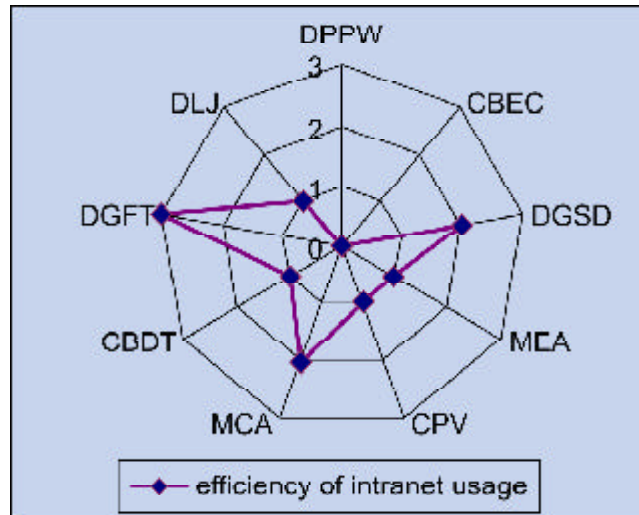


- Notes: 1= Didn't use any IT; 2= Used IT for some processes; 3= Used IT for most processes; 4= Used IT for all processes



For administrative purposes, accounting and payroll services have been computerized in all the selected ministries/ departments. In fact the intensity of application is good in most of the cases (Figure 5.9). This is bound to have a beneficial effect on the functioning of the departments/ministries.

Figure 5.10: Efficiency of use of Intranet Services



- Notes: 0= No Intranet
 1= Intranet exists
 2= Intranet is used for the circulation of official documents
 3= Intranet is used for the circulation of official documents with digital signature

Computerisation of administrative records is at the lower end of ICT application. Use of digital signatures is one application that can speed up and increase the efficiency of ICT technology at a fairly high end. Though we have discussed the use of intranet services and the time of application under the section of infrastructure, its application would really indicate the level of its usage. Out of the nine cases, two did not have intranet facility, four have intranet, but do not use it for circulation of official documents. This means that the existing infrastructure in these four cases is not utilized for official purposes even at a moderately low level. Two of the ministry/department (MCA and DGSD) use it for circulation of official documents. However, official documents without digital signatures do not have a legal

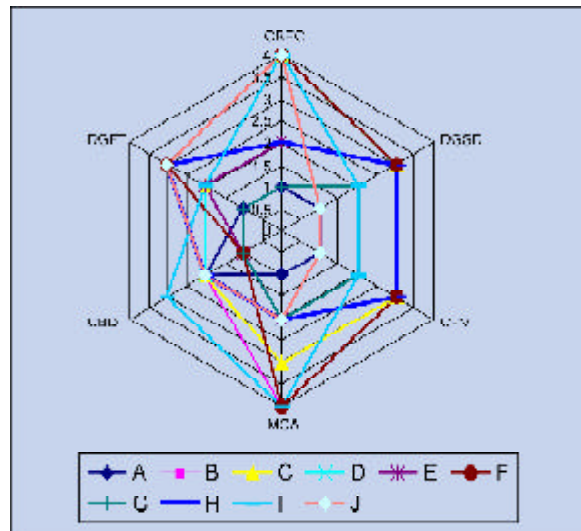
standing. Digital signatures are only used in DGFT and thus the department is the only one using its intranet facility to its optimum level.

5.7 Constraints in Using ICT

From the analysis above, it is clear that with respect to a number of aspects, ICT is not being optimally used to promote efficient e-Governance. The small sample size is a limitation. However, if anything our sample is biased towards a greater applicability of ICT. Given this, it becomes extremely important to understand and identify the nature of constraints in promoting efficient use of ICT.



Figure 5.11: Constraints in Using ICT



Notes: 1 = Does not affect; 2 = Affects to a very small extent; 3 = Affects to some extent; 4 = affects to a large extent

- A = Union related problems
- B = Lack of IT technicians with relevant skills
- C = Lack of employees with relevant skills
- D = Lack of higher level officers (upto joint secretary level) with relevant skills
- E = Budgetary constraints
- F = Lack of integration between different departments in the Ministry
- G = Lack of government support for IT
- H = Resistance to change among employees
- I = No career upgradation for IT trained personnels
- J = High attrition rate of IT trained personnels

As observed from Figure 5.11, the major constraint for the inefficient use of ICT is related to human resources. Three related factors are high attrition rate of IT trained personnel, no career upgradation for IT trained personnels and lack of IT technicians with relevant skills. To some extent, lack of employees with relevant skills is also a constraint in some cases. Government supports, financially and otherwise has not been identified as one of the major problems. Also, unionization has not been seen as a hindrance.

5.8 Summing Up

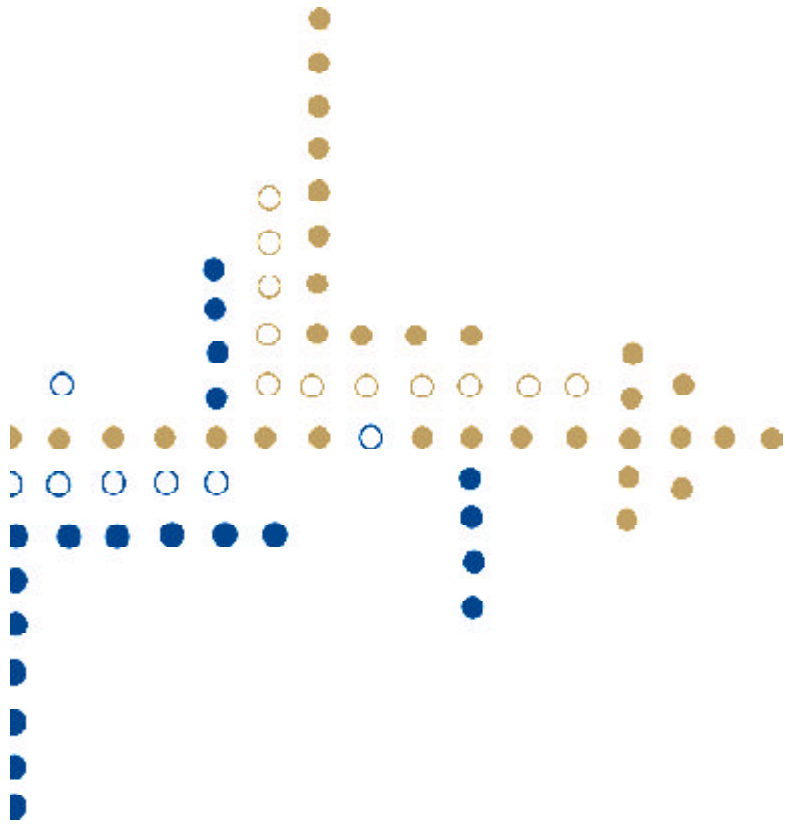
1. The selected ministries and departments have a varied portfolio, and therefore, it is difficult to compare their success or failure in the

application of ICT for promoting e-Governance. Non-response to large number of relevant issues has also hindered our analysis.

2. Infrastructure does not seem to be a major problem. However, facility of intranet is absent in two of the nine selected cases. Also, access to existing infrastructure to the low-level staff appears to be a problem in some cases.
3. Most of the bottleneck seems to be concentrated around efficient usage of existing infrastructure. For example, transaction of official documents or use of digital signatures is not common in spite of intranet availability. Also, the only local language the websites are available in is Hindi. The percolation of information to general citizens



- thus, would tend to be restricted to the Hindi belt only.
4. The institutional system does not appear to be fully conducive towards effective promotion of e-Readiness. A performance evaluation system for any new endeavor needs to be promoted, which does not exist in any of the departments/ministries covered.
 5. Given that most of the constraints in promoting ICT usage is to do with human resource availability, capacity building geared to the requirement of each of the ministries need to be focused on. Also, incentives to IT staff have to be built into the system to gear up retention of the existing talent within the government system.



Annexures

