E-Government Adoption and Diffusion: Lessons from the Outsourcing Industry

Sunil Godse[1]

ABSTRACT

Research shows that e-governance projects in developing countries tend to have high partial or total failures. To try to prevent this, governments should look in their own country at successful business ventures for advice and guidance. India can use the advice and guidance of the entrepreneurs who are driving the rapidly growing outsourcing/offshoring industry. Using this guidance, and with the increase in technology use in India's urban and rural areas and reliance on the outsourcing companies, e-governance projects have a good chance of enhancing their adoption and diffusion.

Keywords: e-governance, adoption, diffusion, outsourcing, offshoring

1. Introduction

E-governance has been defined as the use of information and communication technologies, and particularly the Internet, as a tool to achieve better government (OECD, 2005). It allows the government to provide information to other government departments, citizens and businesses on its affairs, or aid in streamlining processes, thereby reducing time and costs for both the government and its stakeholders. Given the rapid increase in use of computers and the Internet around the world, finding information online is becoming a tool for people to use. Thus, the importance of implementing e-governance is being recognized in many countries today.

One of the challenges faced by developing countries is actual e-government adoption, the use of information and communication technology (ICT) to promote more efficient and cost-effective government, and diffusion, the availability of ICT to the population, businesses and other governments (Westcott, 2001; Holliday, 2002). Results of a 2002 poll combined with 40 reports of e-government cases showed that 35% of e-government projects in developing/transitional countries were total failures, and 50% were partial failures (Heeks, 2003). As a result, adoption and diffusion of the e-government initiatives and associated technologies is slow.

However, there is light at the end of this tunnel. Governments should have successful ventures to model themselves after. They simply have to look to their own successful private sector entrepreneurs as partners to find success (Pacific Council on International Policy, 2002; Deloitte Consulting, 2007). India is an example of a country that is experiencing rapid growth due to the success of many entrepreneurs. One

[1] Richard Ivey School of Business, London, Ontario, Canada (E-mail: sgodse@ivey.uwo.ca, Telephone: (519) 870-7816, Fax: (519) 661-3955)

successful industry that is getting much worldwide attention is the Indian outsourcing/offshoring industry.

2. India's Outsourcing Industry and Its Entrepreneurs

India's outsourcing industry has experienced a high rate of growth. Several studies confirm this growth:

- India remains the top global offshore outsourcing destination… according to the latest research from Gartner…Only India currently has the right combination of cheap resources and robust technology infrastructure for an offshoring destination. Gartner predicts it will continue to pick up the lion's share of global offshore spending on IT services, which is predicted to total $50bn by 2007 (McCue, 2005).
- According to the annual NASSCOM survey, the Indian IT-ITES industry (including domestic market) recorded an overall growth of 30.7% as against a projected growth of 27%, clocking revenues of USD 39.6 billion in FY 2006-07 up from USD 30.3 billion in FY 2005-06…Within the export segment, IT services exports have grown by 35.5% to clock revenues of USD 18 billion; while ITES-BPO exports up by 33.5% registering revenues of USD 8.4 billion. Engineering services and products exports clocked revenues of USD 4.9 billion, growing at 23% in FY 2006-07…The survey also projects that the overall IT software and services sector will grow by 24-27% clocking revenues of USD 49-50 billion in FY08 (NASSCOM, 2007(1)).
- The Indian ITES-BPO segment continues to chart strong year-on-year growth. In the last decade, India has strengthened its leadership position as an offshore destination with an estimated share of 65% of global offshore IT and 46% of global BPO (NASSCOM, 2007(2)).

The outsourcing/offshoring industry's success is due in part to the entrepreneurs in India. One such entrepreneur is Sunil Kant Munjal, Chairman of Hero Corporate Services, who is responsible for the successful information technology side of the corporate conglomerate, the Hero Group. In addition to having a foothold in the BPO (Business Process Outsourcing) market, he has recognized that training is a headache for many firms. This is due to the very high attrition rate and the continual reach to the smaller towns for staff where the percentage of the population that can be trained to an acceptable level of skills and language for the BPO industry is lower. These problems result in a drain on corporate resources and incurrence of high costs in addition to distracting BPO companies from their core business.

As a result, Munjal started Hero Mindmine (www.heromindmine.com), a firm that focuses primarily on training for the BPO industry, providing corporate training programs, trainers and trained staff for companies. Hero Mindmine has established over one hundred training centres across India to tap into both the metropolitan cities and the large number of towns in India, broadening the reach for trainable people, and is India's leading training and development company. The company is so confident in its training abilities that it does not get paid until its clients employ the fully trained staff. Due to this successful business model, Hero Mindmine boasts over 200 clients and has been able to attract high profile companies such as IBM Daksh, EDS, Dell, Accenture and Wipro BPO.

There are many entrepreneurs such as Munjal who can provide the government with information on policies, procedures, implementations, maintenance, efficient asset utilization, and other areas of knowledge that will be required to ensure that e-government adoption and diffusion is successful. The larger outsourcing companies such as TCS and Wipro recognize the attractiveness of e-governance projects. Wipro claims to have 10 percent of its domestic revenue through e-governance, and TCS projects at least 10 percent contribution to its revenues in the e-governance areas by 2009-2010 (Singh, 2007). Hence, relying on the entrepreneurs in the outsourcing industry as partners will greatly benefit e-governance adoption and diffusion.

3. Technological Awareness In India

One of the aims of e-governance adoption and diffusion is availability to the general population. However, a majority of the Indian population lives in villages spread around the country. According to a 2001 Census, 72.2 percent of the Indian population lives in rural areas (Office of the Registrar General & Census Commissioner, 2006). This could pose to be a problem. However, over the last 15 years, the state owned telecom operator, BSNL, has taken fibre to almost every taluka (county town) in India. Given that wireless coverage from these points encompass a 15 to 20 kilometer area and 85 percent of the villages in low level areas fall within a 30 kilometer radius, connectivity may not be an issue (Jhunjhunwala, 2004).

In urban areas, Internet use has grown tremendously. A joint study by the Internet & Mobile Association of India and the Indian Market Research Bureau (IMRB International and IAMAI, 2006) revealed the following:

- The number of PC literates is growing steadily over the years and has grown by 270 % over 2000. The growth of Ever Users [used the Internet at any point in time] and Active users [used the Internet at least once in the last 1 month] has been even more impressive with 540% & 950% respective growth over 2000.
- The trend of Active users as a proportion of Ever users has grown from 40% in 2000, to the current proportion of 66%. In addition, from 27% in 2001, the Non Metros and Small Towns now account for 39% of all Internet users.
- The number of Internet subscribers is growing steadily and has increased from 25,000 to 2.9 million in the period 1997-2006.
- from a mere 9% in 97-98, the proportion of users who own an Internet connection has come up to 76% of the total PC owning base.

These reports show that there is a clear trend towards increased technological awareness and use in both rural and urban areas.

4. E-Governance projects with Outsourcers

With both the government and the private sector coming together as partners, e-governance projects should have a better chance of success. There are indications that the Indian government is involving outsourcing companies in e-governance projects. Examples include:

- Aimed at using information technology applications for the benefit of Delhiites, the Municipal Corporation of Delhi today signed a memorandum of understanding with the eGovernment Foundation, a non-profit organisation supported by Fortune 500 Infosys (Staff Reporter, 2004).
- The Company Affairs Ministry had shortlisted TCS and ICICI Infotech for its programme covering all departments to provide effective services to registered corporate entities…The project is aimed at providing savings in time and transaction costs to over six lakh [600,000] companies registered in India. The services proposed include filing of statutory documents, registration of new companies, and ensuring availability of documents in public domain through use of computers and the Internet (Mishra, & Bakshi, 2004).
- The Rajasthan government is also working towards inviting IT giants to invest in the state. The state government recently managed to convince Genpact to start their operations in Rajasthan…The e-governance projects devised by the government pertain to computerization of all departments to bring in more transparency and efficiency along with making intra as well as inter department communication and data exchange process smooth. Payment of bills, property registration, issuances of birth and death certificates, FIR (first information report) registration are some of the processes that have been simplified by government's e-governance efforts (Choudhary, 2006).

- In May 2005, the Municipal Corporation of Delhi (MCD) had outsourced its e-Tendering system to Wipro, who in turn have implemented similar systems for the governments of Madhya Pradesh and Chhattisgarh (Talgeri, 2007). The Karnataka State Police Housing Corporation has benefited from such a system for its projects. The system has significantly reduced processing time by over 70 percent, increased the number of suppliers to 6,000, and saved the state Rs. 1,000 crore [over USD $248 million] (Sep 13, 2007 rate: www.exchange-rates.org/USD/INR/1.0000). The system also accounts for 80% of the state's total buying (Radhakrishna, 2007).

At present, a vast majority of the information available on the government websites is domestic in nature such as filing taxes, passport applications, etc. Although an internal view of e-governance is recommended, information for external businesses should not be ignored. For example, if a company is looking to outsource to India, it may seek information such as import/export laws, taxes, license issues, key government contacts, etc. Having this information online may increase the level of foreign business interest. With the examples just described, success in e-governance projects is enhanced with the involvement of Indian outsourcers.

5. Concluding Remarks

E-governance adoption and diffusion projects in India will continue to experience some failures. However, the Indian government is well positioned to reduce the number of failures through partnership with successful entrepreneurs in the outsourcing industry. These same firms are becoming involved in e-governance as they recognize the importance of these projects as both a revenue source and good corporate social responsibility. The adoption and diffusion of e-governance projects is also becoming easier due to the increase in Internet access and use in both rural and urban areas. In addition, there already are a number of internal e-governance projects underway providing a possible roadmap for success. All of these factors should make e-governance adoption and diffusion an easier task for the Indian government.

References

1. Choudhary, A. (2006). Rajasthan woos IT investors. CIOL.com, DQ Channels. Available at: http://dqchannels.ciol.com //content/space/106100203.asp. Accessed September 15, 2007.
2. Deloitte Consulting (2007). Government Performance: Lessons Learned from the Business World: An interview with Christina Dorfhuber. Deloitte Consulting LLP
3. Heeks, R. (2003). Most e-Government-for-Development Projects Fail: How Can Risks be Reduced? i-Government Working Paper Series. Manchester, Institute for Development Policy and Management, University of Manchester. paper no. 14
4. Holliday, I. (2002). Building e-government in East and Southeast Asia: Regional rhetoric and national (in)action. *Public Administration & Development* 22, (4): 323
5. IMRB International and IAMAI (2006). *Internet in India – 2006 Report.*
6. Jhunjhunwala, A. R., Anuradha; Bandyopadhyay, Alankar (2004). n-Logue: The Story of a Rural Service Provider in India. *The Journal of Community Informatics* 1, (1), 30-38
7. McCue, A. (2005). India still first choice for offshore outsourcing. Silicon.com. Available at: http://services.silicon. com/offshoring/0,3800004877,39152487,00.htm. Accessed September 9, 2007.
8. Mishra, R. and M. Bakshi. (2004). TCS may get Rs 318-cr e-governance project. *The Hindu Business Line*. Available at http://www.thehindubusinessline.com/bline/2004/12/09/stories/2004120901460500.htmT. Accessed September 15, 2007
9. NASSCOM (2007(1)). Indian IT Software and Services Revenues to reach US $50bn mark in FY 07-08. Available at: http://www.nasscom.in/Nasscom/templates/NormalPage.aspx?id=51734. Accessed September 10, 2007.
10. NASSCOM (2007(2)). Indian The changing BPO Landscape: an update on the Indian ITES-BPO Industry. Available at: http://www.nasscom.in/Nasscom/templates/NormalPage.aspx?id=51971. Accessed September 10, 2007.
11. OECD (2005). E-Government for Better Government. *OECD E-Government Studies*

12. Office of the Registrar General & Census Commissioner, I. (May 2006). *Population Projections For India and States 2001-2006*
13. Pacific Council on International Policy (2002). Roadmap for e-government in the developing world: 10 questions e-government leaders should ask themselves. *Working Group on E-Government in the Developing World*.
14. Radhakrishna, T. (2007). Savings Up for Auction. CIO India. Available at: http://www.cio.in/govern/viewArticle/ARTICLEID=646. Accessed September 15, 2007.
15. Singh, H. (2007). TCS sees $1b from e-gov biz by 2010. *The Economic Times*. Available at: http://economictimes.indiatimes.com/TCS_sees_1b_from_e-gov_biz_by_2010/articleshow/1479759.cms. Accessed September 10, 2007.
16. Staff Reporter. (2004). MCD's e-governance gets Infosys boost. *The Hindu*. Available at: http://www.hindu.com/2004/07/22/stories/2004072210170400.htm. Accessed September 12, 2007.
17. Talgeri, K. N. (2007). Delhi, India to set up 'comprehensive' e-procurement system. IT World Canada. Available at: http://www.itworldcanada.com/a/Extended-Enterprise/a9370738-e371-4cee-8dcb-d52207a095b1.html. Accessed September 14, 2007.
18. Westcott. C. G. (2001). E-government in the Asia Pacific Region. Available at: http:\\www.adg.org/documents/papers/E-Government. Accessed September 13, 2007.

About The Author

Sunil Godse is a doctoral student at the Richard Ivey School of Business (Ivey) in London, Ontario, Canada. He has earned a B.Sc. in Civil Engineering from University of Manitoba and an MBA from Ivey. He has managed multimillion dollar international engineering and IT projects. In addition, he has held both President and Vice-President positions in the healthcare consulting industry before entering the PhD program at Ivey. His current interests lie in the outsourcing industry and IT strategy and business alignment.