IIMB Management Review (2017) xx, 1–19

available at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/iimb

IIMB Management Review

Management and financing of e-Government projects in India: Does financing strategy add value?

Shashank Ojha [a], **I.M. Pandey** [b,c,*]

[a] *ICT & e-Governance Global Practice, World Bank, New Delhi, India*
[b] *Delhi School of Business, India*
[c] *IIM, Ahmedabad, India*

Received 11 September 2014; revised 28 May 2016; accepted 25 April 2017; available online

KEYWORDS
Project finance;
Public–private partnership;
e-Government;
Financial structuring;
PPP for e-Services;
Financing of e-Services

Abstract How do managers structure e-government projects and address challenges of risks, lack of technical expertise, and mitigation of strategic error for preventing loss of investments? Our aim was to compare the traditional finance approach and the strategy-driven, innovative financing approaches under the PPP model, to examine their managerial value-addition. We found that e-government projects require a carefully crafted structuring strategy and that innovative financing is more suitable in facilitating flexible decision making, building core capabilities, managing and sharing project risks, providing funds needed for growth and innovation, and customising tailor-made project governance strategy. Based on our findings, we develop five theoretical propositions.

Introduction

The adoption of information and communication technologies (ICT) in government over the last decade has grown significantly across the globe. The Global Information Technology Report (GITR) 2009–10 (World Economic Forum and INSEAD, 2010–2011)[1] has shown a positive relationship between global competiveness and digital readiness, and has emphasised the positive relationship between per capita GDP with information technology (IT) readiness of the economy. Innovative application of ICT in government (e-Government) over the last decade has resulted in new solutions and ideas to address the complex challenges that governments face. These ICT-enabled solutions have helped governments to improve efficiency and transparency, reduce the high costs of delivery of public services, and improve government's reach to the under-served segments of society. Investments in e-Government projects across the globe are therefore growing significantly. The Lisbon Summit (2000) set the goal for making Europe the world's most competitive and dynamic knowledge-based economy. In 2003, the Russian Federation launched a federal budget of 1.43 billion rubles for financing the e-Russia

* Corresponding author. Fax: +91 11 27343401.
E-mail address: impandey@dsb.edu.in (I.M. Pandey).
Peer-review under responsibility of Indian Institute of Management Bangalore.
[1] Global Information Technology Report, World Economic Forum, IMF (GITR, 2009–10).

http://dx.doi.org/10.1016/j.iimb.2017.04.002

Please cite this article in press as: Shashank Ojha, I.M. Pandey, Management and financing of e-Government projects in India: Does financing strategy add value?, IIMB Management Review (2017), doi: 10.1016/j.iimb.2017.04.002

programme (Mimicopoulos, 2004). In Asia, Singapore has been leading in e-Government initiatives with its e-Government Action Plan I and II (eGAP I & II) to bring as many services online as possible.[2] In 2003, Singapore approved a US$ 1.3 billion plan to upgrade its government services resulting in about 1600 public services being provided online. Similarly, the e-Taiwan project launched in China earmarked NT$ 36.2 billion (US$ 1.04 billion) for its e-Government initiative to build a fully computerised society. In future, it is expected that India and China will drive the growth in IT spending in the Asia Pacific region (Mimicopoulos, 2004).

However, as investments in e-Government projects are increasing across the globe, there are growing concerns on account of the large number of project failures, which has resulted in significant loss of major investments. The global experience shows that these investments have proved to be major challenges even in developed countries. According to the Standish Group Report (2009),[3] "...32% of all projects succeeding ... delivered on time, on budget, with required features and functions". Similarly, as per Heeks (2001), one-fifth to one-quarter fall into the total failure category; one-third to three-fifths fall into the partial failure category; and only a minority falls into the success category. The large scale failure of these projects indicates fundamental management challenges in managing business and financial risks inherent in these large and complex projects.

In such a situation, the main concerns for e-Governance project managers are:

a) How to take better investment decisions for large e-Government projects with complex and multi dimension risks so as to mitigate the risks of strategic error in preventing loss of investments
b) How to improve the structuring of these projects so as to have an optimum mix of resources (including human, technical and financial) to maximise value derived from these investments, and
c) How to access and secure continued project funding over a multiple year time-frame in an environment of increasing constraints on public resources.

Most of the e-Government projects across the globe (including India) adopt the traditional project financing approach where the entire project is funded through government budgetary resources and operated by the government. However, as public financial resources become scarce, other options need to be explored. Full privatisation or outsourcing of public services to the private sector is an option. This option can help in getting full project funding from the private sector service provider; however, control over the services provided, the tariff charged, and of assets moves into the hands of the private vendor which may not be in the interests of the public.

Another option of operating and funding large projects is the public–private partnership (PPP) model. The PPP Knowledge Lab[4] defines a PPP as "a long-term contract between a private party and governance entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance". Public–private partnership models provide the flexibility of innovatively structuring financing of projects, which may involve complex transactions and arrangements. Governments across the world, including the Government of India, have policies to promote PPPs in the infrastructure sectors. In e-Government projects, the National e-Governance Plan (NeGP) approved in 2006 specified that the PPP model is to be adopted wherever feasible—mainly to enlarge the resource pool without compromising on the security aspects. These guidelines have been based on some initial successes experienced by PPPs in e-Government projects in India, mainly by state government projects, for example AP Online, the official portal of the Government of Andhra Pradesh, Kerala's community technology centres—Akshaya e-Kendras, Karnataka e-Procurement, and so on. However, PPP projects in India are still at their initial phase and it is not clear if PPP initiatives provide any real value add in addressing the challenges discussed above.

Does the source of financing (government/PPP) and the method of financing traditional/structured) help in improving investment decision making, reducing risk, facilitating optimum structure of resources and solving the funding problem of e-Governance projects? This study explores this question and is based on an evaluation of four case studies (two with PPP approach and two with traditional financing) with the objective of examining the comparative sources of value-addition in the better management of e-Government projects, which are complex and risky, and to prevent loss of investments.

Literature review

The literature review was carried out to address three main questions through the existing body of management research and studies:

a) What are the main objectives of and key drivers for implementing e-Government projects? Can investment and financing decisions help organisations in seeking these objectives?
b) What are the main challenges, complexities, and constraints that make e-Government projects risky and prone to high levels of failure?
c) Given the high risk–high return character of these projects, can a better approach to investment and financing decisions make a significant impact on the management of these complex and high risk projects?

In order to understand the main drivers and underlying objectives of implementing the e-Government concept, it is important to study the underlying theories of public sector management that aim to achieve effective governance or good governance. The viewpoint is in consonance with the public policy strategies promoted by the World Bank and other Bretton Wood institutions where "governance is basically

[2] "Singapore announces 1.3 bln sgd plan to boost e-government" The Edge Malaysia, July 7, 2003. http://www.europarl.europa.eu/summits/lis1_en.htm.
[3] https://www.projectsmart.co.uk/white-papers/chaos-report.pdf.
[4] https://pppknowledgelab.org/guide/sections/1-introduction.

Please cite this article in press as: Shashank Ojha, I.M. Pandey, Management and financing of e-Government projects in India: Does financing strategy add value?, IIMB Management Review (2017), doi: 10.1016/j.iimb.2017.04.002