



## RESEARCH ARTICLE

### E-GOVERNANCE – THE DIVIDE BETWEEN THEORY AND PRACTICE (A STUDY OF E-GOVERNANCE SERVICES IN HARYANA, INDIA)

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#### ABSTRACT

Events like the easing of the US Government's clutches over the Internet technologies in the late 1980s, the coming of the World Wide Web from CERN, the European Nuclear Research Labs, around the same time, and the spread of mobile telephony in India in 1990s, have triggered Governments' interest in honing of these technologies for delivery of citizen services. By the end of the first decade of the third millennium CE, several e-Governance projects were afoot in India. Almost a score of years is passed since India saw one of its pioneering e-Governance projects – Drishtee. Success stories of e-Governance portals abound, there is another facet of the delivery of public services through digital electronic means. The fruits of these projects can be reaped to an extent severely limited by the *Great Indian Digital Divide*. Firstly, E-Governance projects are rarely fully digital sans humans, and secondly, the rural-urban and gender-based digital divide poses serious limiting challenges to such endeavours. The present communication studies the gaps between the promises made in e-governance concept papers and the ground realities of e-governance projects in the specific context of e-governance services rendered by the Haryana Government.

#### INTRODUCTION

Electronic governance refers to the use of information and communication technologies within different organs of the government and to deal with its citizens and business entities. The research community has used a wide array of terms and phrases to describe and discuss the use of one or the other flavour of modern digital technologies and particularly web-based portals for the delivery of citizen services. However, lately, the research fraternity and industry, both, seem to standardize the term e-governance for the purpose. E-governance involves, in the least, a business process re-engineering effort by a government agency to enable its clients (read citizens, businesses, and peer govt. agencies) to initiate the service transaction, and monitor the service progress, to interact with the govt. agency to supply the supplementary information (if required), and to receive the e-service artefact. The theoretical framework of e-governance combines all the theories established in the literature, which are inclined to claim it as a subject of research and literary discourse. It spans the conceptual models and methods that various researchers have (i) hypothesised and (ii) tried to identify the factors considered critical to the success of e-governance efforts (Lindgren and Jansson, 2013).

Such a framework is desired to cover all the parameters affecting the modus operandi of e-governance projects and rank them according to their relative importance so that the planning authorities might schedule their resources accordingly. Moreover, with the changes in economic, technological, and societal outlook, the e-G framework itself must be capable of modifications (Rana, et al. 2012). Electronic governance solutions across the globe can broadly fit one or more of the following conceptual and theoretical frameworks mentioned in the literature (ibid.).

- **Contrarian theory**, wherein, things are seen from an altogether different perspective than the traditional approach.
- **Systems theory** relies on the idea of the use and extension of successful theories of one field (such as computer science, and operational research) to other fields.
- **Gatekeeping theory** applies a filtering transformation to the information that is meant to be communicated and delivered.
- **Network theory** also becomes relevant, for, the delivery of e-governance services involves organizational networks.
- **Socio-technical system theory** is relevant to gaining an insight into the technical and social aspects of e-governance.
- **Motivation theory** helps to study the behaviour of people regarding rejection or adoption of e-G projects.

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- **Stakeholder theory** emphasizes the involvement of stakeholders during all the stages of e-G projects.

**Language of the e-G interface:** With almost half the population of India using the Internet, a very important factor impeding the adoption of electronic governance is the language of the Internet as also the language of the user interface of e-Governance portals. Other factors like expense and cost of the Internet services are also important. For the intended benefits of electronic governance initiatives to reach the target population, it is required that the services offered through the e-G portals be provided in the mother tongues of the Indian citizenry. To understand the gravity of the problem, consider the following figures.

“As of 2021, the Indian language content comprises around 0.01% of the total *surface web* content as compared to the 57% content created in English.” In India, a country having more than 20 official languages, the efforts required to localize the portals’ content and interface language, are bound to be a herculean task. Here comes to picture the need to stick to international standards for the representation of information, so that the content duplication is not required and the translation and/or transliteration of the content takes place seamlessly. While compiling an assorted list of success factors of e-G projects, Singh (2011) has placed the requirement of a local language interface at the top of the list. With a population of over 1.4 billion, over a billion literate people in India as of 2022[NSO] there are around 140 million English speaking people, according to the most conservative of the estimates. And, given the fact that English is the de-facto language of user-interfacing and content creation for the Internet services – which rely, among other things, on the searching facility. This leaves around a quarter and one billion Indians out of e-G services and places them at the mercy of window-person of public e-G projects or the private kiosk operator. A private kiosk operator handling the personal identities of illiterate and semi-literate citizens is at almost unbounded liberty to misuse the identities and other personal data of her/his customers. Stolen identities can be used for issuing SIM cards for the perpetration of cybercrimes (Alam and Hassan, 2010).

To address the issues of the development of local language content, a Govt. of India website [www.localisation.gov.in](http://www.localisation.gov.in) provides tools and other resources for translating the Internet content into local languages. Table 1. lists such resources:

**Table 1. Local language tools on localisation.gov.in**

#	Tool/Resource Type	Count
1	Citizen tools	09
2	Developer tools	16
3	Android tools	16
4	Translation tools	03
5	Training resources	15

**The great Indian digital divide:** While some can still afford to go to government schools and continue their education, many children in rural India have had to drop out and help their parents earn daily meals. According to a recent survey by National Statistics Office (NSO), only 15% of rural households have access to the internet as against 42% of urban households. And, only 10% of students can operate computers in rural India. The digital divide in India can be classified as (i) gender-based, and (ii) geography-based (Iqbal, 2021).

**Gender divide:** Although the Covid’19 pandemic has accelerated the adoption of digital technologies in India and elsewhere, at the same time, it has widened an already existing and very wide gender-based digital divide - the disparity between male and female populations with regards to the ownership and use of digital technologies. The 2020 gender disparity data reported in ORF (2021), has been summarized in the following table.

**Table 1. The male-female digital divide in India**

Particulars	Female	Male
Mobile phone ownership	67%	79%
Ownership of smartphone	25%	41%
Internet access through mobile phone	30%	45%
Mobile Internet awareness	53%	69%
Average weekly mobile Internet use cases	4.9	6.7
Internet access ever (average)	33.3%	57.1%

Experts attribute the abysmally lower levels of digital literacy amongst women, the selling price of smartphones, and not-that-cheap data costs as the three top parameters of the gender-based digital divide. Studies have shown that females of the family are the first casualty of any hardship befalling the family (Iqbal, 2021).

#### Rural-urban divide

**Table 2. The rural-urban digital divide in India**

Particulars	Rural	Urban
Broadband penetration in Indian households as on 31.03.2020	29.2%	93.0%
Women have ever accessed the Internet	24.6%	51.8%
Delhi women who have ever accessed the Internet	69.2%	63.7%
General literacy rate	73.5%	87.7%
Digital literacy rate	25%	61%
Availability of computers Source: NSSO 2017-18 Survey	4.4%	14.4%
Connections per 100 Source: NSSO 2017-18 Survey	27	104
Internet access Source: Financial Express Internet Reach Survey2020	25%	90%

**E-Governance assessment frameworks:** Numerous frameworks may be proposed for quantitative and qualitative evaluation of electronic governance service portals may be evaluated. Performance evaluation parameters will depend upon the scope of the e-G project and the demographics of its target audience. One very important parameter in the Indian context is the cost of availing of e-G service, as mentioned in assessment model 1 (section 4.1) below.

**Assessment model 1:** Almeida and Zouain (2016) have provided two frameworks for evaluating the e-governance projects wherein they have grouped the parameters having a bearing on the success (or failure) of such projects into three classes, namely, monetary, governance and other qualitative parameters.

#### Monetary parameters

- Number of visits made to a service centre
- Average travel cost per visit
- Average wage loss per visit
- Total time spent in availing e-G service

- Official fee paid for the service

### Governance parameters

- Degree of corruption before e-G
- Citizen charter and its adherence
- Accountability for lapses
- Simplicity of governance process
- Feedback mechanism

### Other (qualitative) parameters

- Location of service centre
- Working hours of a service window
- Courteousness of the service staff
- Response time of client queries
- Grievance redressal mechanism
- Protection of personal data

### Assessment model 2

In an alternate e-G services assessment model, the framework may be evaluated on the following parameters (Almeida and Zouain, 2016):

**Process:** The business process of any e-G portal/service may be evaluated on the bases of simplicity (qualitative), efficiency (quantitative), orientation (citizen, business, or government), sustainability, and cost-effectiveness of the services rendered.

**People:** From viewpoint of different levels of stakeholders/people involved in e-G projects, the vision of leadership, the commitment of middle-level management, competencies of operational staff, and willingness to change at all levels of human resource is important.

**Technology:** System architecture, observance of global open standards, reliability of the service provisions, scalability of service facility, and security of data and service facility against cyber-attacks, etc. are the technological parameters of importance while evaluating an e-G service.

**Holistic:** Overall, adequacy, efficiency and sustenance of the e-G solutions are the most important parameters used for evaluating the success (or failure) of any e-G project.

**E-governance services in Haryana:** According to National e-Governance Portal, Haryana offers a total of 819 electronic governance services classified into 15 categories (Table 3). Of the total 819 services 771 services are claimed to be *fully online*, 31 services are *partially online* and 17 services are only *informational*. It is worth mentioning that not all the services are available for all the citizens of Haryana state. Twenty-two (fully online) services are meant only for the residents of Gurugram city; seven services (2 informational and 5 fully online) are available only for Faridabad residents; four services (1 partially online and 3 informational) are for Panchkula residents; one fully online service is available for the residents of Hisar town.

Another digital services portal, namely, Common Services Centre (CSC), also known as Atal Sewa Kendra, are spread across the length and breadth of the state through village-level entrepreneurs (VLE).

Services hosted through CSCs are classified into six categories, namely, government to citizen (G2C), business to customer (B2C), business to business (B2B), educational, financial inclusion, and miscellaneous. The CSC portal (interface and information) is inherently developed in English and has no tab for switching to any local language. Yet another govt. portal of Haryana, Antodaya Saral Portal, provides as many as 618 schemes/services (229 schemes and 389 services) online through URL saralharyana.gov.in. These 618 schemes and services are spread across 47 departments. Although the home page of this portal can be displayed in Hindi, at the immediate next level, most of the content is English based.

**Table 3. e-G services' array for Haryana residents**

#	Class of services	No. of services
1	Agriculture, rural, environment	73
2	Birth, death, childcare, marriage	89
3	Business, self-employment	172
4	Citizenship, visa, passport	15
5	Education, learning	47
6	Electricity, water, local services	280
7	Health, wellness	10
8	Jobs, recruitment	53
9	Law, justice, grievance	29
10	Tax, finance	47
11	Pension, benefits	70
12	Science, IT, communication	11
13	Transport, infrastructure	46
14	Travel, tourism	05
15	Youth, sports, culture	21

### Conclusion

Although the genesis of e-governance dates back to the last decades of 20<sup>th</sup> century, it picked the momentum in the 21<sup>st</sup> century. The success of these projects hinges equally on the four pillars, namely, people, process, technology, and resources. These projects are about providing *resources* (read services) to *people* through *technology* solutions and by re-engineering the government's business *process*. Further, it was concluded that there are four stages in the development of e-governance solutions, namely, *information*, *interaction*, *transaction*, and *transformation*. Information level e-G services are one-way public information outlets and are the most primitive of such projects, whereas the interaction level projects provide interactive services to the citizens. Transaction level e-G solutions allow the citizen to carry out electronic transactions like paying dues and bills of public utilities, booking and purchase of assets, goods and services. The advantages of e-G are abounding, but these solutions are marred by the very stark digital divide in India. There exists a digital divide of two main kinds, namely, the rural-urban divide and the male-female divide. These two hues of the digital divide position rural females at the most receiving end of the spectrum. Further, general literacy, digital literacy, and the inherent tilt of the Internet towards the English language prove limiting factors in realizing the benefits of e-G services.

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