Electoral Competition and Digital Development in India and South Africa

J. Bussell

Abstract—In the last decade many developing country governments made efforts to improve service delivery and access to information through the use of new information and communication technologies (ICTs). The character of these efforts, however, varies widely both across and within countries, resulting in continued inequality to access. What incentives influenced the initiation of these projects? How might variation in these incentives have affected the projects themselves? To answer these questions I compare the efforts of sub-national governments in India and South Africa to implement ICT-enabled service centers. In particular I consider what factors led to the implementation of ICT initiatives in urban versus rural areas. I find that politicians use ICT projects to achieve specific electoral goals and thus electoral conditions, specifically the character of political competition and ruling party support bases, can help to explain decisions to implement service centers for rural or urban populations. I use the cases of Gujarat, Tamil Nadu and Andhra Pradesh in India and the Western Cape and Gauteng in South Africa to illustrate this argument.

Index Terms—Electoral competition, eGovernment, India, information and communication technology, South Africa

I. INTRODUCTION

IN the last decade many developing country governments attempted to improve service delivery and access to information through the use of new information and communication technologies (ICTs). From eGovernment systems to public computer centers where citizens can access services or use the Internet for personal activities, the range of success and failure in these projects has been widely publicized and analyzed [1]-[4]. But less attention has been given to the logic of the projects themselves. What incentives led to the initiation of these projects and how might variation in these incentives have affected the projects themselves?

In this paper I attempt to gain leverage on these questions through a comparative analysis of efforts in India and South Africa to provide ICT-enabled services to citizens. I find that political strategies influence the design of policies to utilize information technologies in service delivery, as politicians use ICT initiatives to achieve specific electoral goals.² I focus on a basic characteristic, whether ICT-enabled services initiatives are implemented for urban or rural users, to show that variation in this characteristic is a result of ruling party electoral strategies. These strategies result from a consideration of political competition and the character of the party’s support base. ICT projects are supported during times of intense electoral competition to maintain the support of certain core constituent groups or to develop new support bases.

This general argument is elucidated by a brief overview of three Indian state cases. In Gujarat the dominance of urban support for the ruling Bharatiya Janata Party (BJP) leads the party to pursue more aggressive “civic centres” initiatives in urban areas. But due to persistent competition from the Indian National Congress party (INC or Congress), and a 63% rural population, the party cannot ignore rural areas completely. Instead the party leadership takes a passive approach, leaving proactive bureaucrats to pursue ICT initiatives supported indirectly by the executive. In Tamil Nadu we see almost the exact opposite case. The two dominant parties, the DMK and AIADMK, are in close competition, alternating state control regularly and often vying for public support through populist redistribution programs. The AIADMK, in power from 2001 to 2006, depends more on a rural base than the DMK and draws little support from the major urban center of Chennai. To serve their base, the party implemented a rural ICT-services initiative. By 2007 there were still almost no ICT-enabled government services in Chennai. Finally in Andhra Pradesh, both dominant parties, the Telugu Desam Party (TDP) and Congress, draw almost evenly from rural and urban areas. The TDP’s focus on urban IT industry development, however, gave it a slight urban-focus, exhibited in its eSeva initiative. The Congress responded to this as a part of its successful anti-urban-bias campaign against the TDP in 2004, after which it implemented a major rural services initiative.

This paper proceeds with a discussion of methodologies and concepts used in the analysis. I then consider arguments about the characteristics of ICT initiatives and the potential relevance of electoral characteristics for policy outcomes. Next I develop the details of my argument in the context of three Indian states, Gujarat, Andhra Pradesh, and Tamil Nadu. I subsequently compare the analysis of the Indian cases in

² It is possible, and likely, that politicians also use these initiatives to achieve other, less reputable, goals, such as under-the-table funds through contract manipulation or other benefits. In this analysis I focus only on the potential electoral benefits derived by politicians from providing services to constituents.
general to the experiences in two South African provinces, Gauteng and the Western Cape.

II. METHODOLOGY

This analysis is based on a qualitative comparison of two countries and sub-national units within these countries. I draw on personal interviews with government officials and project representatives, field visits to project sites, and secondary analyses of the individual cases.

A. Case Selection

While my emphasis is on sub-national comparisons, I compare these findings in general across two countries. This strategy draws in part on analyses of Indian politics and political economy, which exhibit a trend toward sub-national, state-level comparisons. Chhibber and Nooruddin note that “[t]he large institutional differences, which make cross-national comparison more difficult, are not present to the same extent within a nation state” [5]. For policy areas where states or local governments have control over policy decisions, this provides an opportunity for insights into this policy-making process that may be more viable than comparisons across a small number of countries. A key example is a recent edited volume containing eight individual analyses, each comparing a different topic across two Indian states [6].

The comparison of India and South Africa in general is facilitated by multiple structural similarities of the countries. Both are large, semi-developed federal countries that delegate similar responsibilities to the state/provincial level. South Africa has a higher GDP/capita than India ($11,190 versus $3,115, respectively), but the countries are similar in terms of Human Development Index (.658 for South Africa and .602 for India) and Poverty Index (30.9 for South Africa and 31.3 for India).3

Within these two countries, my case selection is based on variation in my independent variables of interest – electoral competition and party support bases – and a set of economic and development characteristics. I chose cases that are reasonably similar in these latter structural characteristics so as to limit their potential interference in my examination of electoral trends. For India, I chose states where there is some evidence of government efforts in the area of ICT-enabled services. This is because, as I discuss below, I am interested in explaining variation in project characteristics, not the presence of projects in general. This is more difficult for South Africa, which to an extent is a negative case, as there is only one major provincial government initiative to consider. As a result I discuss a second province to elucidate the electoral conditions that may be relevant in the province with an ICT-enabled services initiative.

The Indian states I examine are Andhra Pradesh, Gujarat, and Tamil Nadu. All three states have slightly above average state domestic product per capita.4 In terms of development indicators, they typically hover around or above the national average (See Table 1).5

<table>
<thead>
<tr>
<th>State</th>
<th>State Domestic Product/Cap (Rs.)</th>
<th>Literacy Rate 2001 (%)</th>
<th>Electricity at Home (%)</th>
<th>Drinking Water at Home (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>24,432</td>
<td>61</td>
<td>67.2</td>
<td>31.1</td>
</tr>
<tr>
<td>Gujarat</td>
<td>23,242</td>
<td>70</td>
<td>80.4</td>
<td>46.5</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>20,818</td>
<td>73</td>
<td>78.2</td>
<td>27.1</td>
</tr>
<tr>
<td>16 state Average</td>
<td>18,805</td>
<td>66</td>
<td>60.2</td>
<td>41.0</td>
</tr>
</tbody>
</table>

The states also exhibit a range of electoral dynamics. Gujarat has two main parties, the Bharatiya Janata Party and the Indian National Congress, but is recently dominated by the BJP. Andhra Pradesh is also a two-party state, with recent alternation between the Telegu Desam Party and Congress. In Tamil Nadu, the two dominant parties, the DMK and the AIADMK, typically alternate power, but are recently losing votes to smaller parties. These cases exemplify the characteristic of Indian politics that states with similar electoral competition profiles do not necessarily have the same dominant parties.

In South Africa, the two provincial cases exhibit above average measures across all four indicators (see Table 2). However, the provinces are similar to each other, thereby facilitating a comparison of electoral conditions. The ANC dominates the provincial legislature in Gauteng with only minimal competition from the Democratic Alliance. In the Western Cape, the Democratic Party/Alliance has played a more competitive role over the last decade, with the (New) National Party also adding to the competitive dynamic.

<table>
<thead>
<tr>
<th>Province</th>
<th>Province Domestic Product/Cap 2004 (ZAR)</th>
<th>Literacy Rate 2001 (%)</th>
<th>Electricity at Home (%)</th>
<th>Piped Water at Home (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Cape</td>
<td>44,079</td>
<td>80.4</td>
<td>88.1</td>
<td>67.6</td>
</tr>
<tr>
<td>Gauteng</td>
<td>52,285</td>
<td>81.4</td>
<td>80.6</td>
<td>46.5</td>
</tr>
<tr>
<td>9 Province Average</td>
<td>30,523</td>
<td>68.5</td>
<td>70.1</td>
<td>33.1</td>
</tr>
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</table>

B. Dependent Variable

The dependent variable is implementation of ICT-enabled service delivery initiatives, with emphasis on the location of these initiatives in rural versus urban areas. By ICT-enabled service delivery I mean efforts by government actors to

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3 All country-level indicators are from the 2006 World Bank Knowledge Assessment Database.

4 Comparison of the 16 largest Indian states and based on 2001 census estimates and Reserve Bank of India reports for 2002-3.

5 All figures based on 2001 Indian census estimates. 16 state average excludes the Northeast, small and new states.

provide services to individuals or groups through the use of information and communication technologies. This may include a wide range of government and private services, from birth certificate applications, grievance submissions, and information on government welfare schemes to computer and Internet access, health and agricultural services, mobile phone bill payments, or digital photography.

These efforts are important because they can potentially change the relationship between government and citizens. In developing countries there are often major constraints on public service delivery, including the distance of citizens to government offices, and corruption in the service delivery process. These projects can change the process by which services are delivered, with the potential of reducing constraints by bringing government closer to peoples’ homes, through facilitated service centers, or even removing government intermediaries from service delivery through the provision of online services. Government promotion of private services can also affect the relationship between businesses and consumers.

For this analysis I consider a particular institutional mechanism used to deliver these services, the ICT-enabled service center. Otherwise known as telecenters, community information centers, community service centers, knowledge centers, or Internet kiosks, the defining quality of these centers is the presence of computers, frequently with Internet access. My conceptualization of these centers is somewhat different from other analyses. Something considered a “telecenter” in one part of the world, or even in one part of a country, might not be defined in the same way elsewhere. In order to develop comparisons here, I depend on a structural definition. The key defining qualities of the centers I consider are: government actors as project stakeholders, presence of computers, public location (not including schools), and availability of services of some type to the public. This definition excludes purely private-sector initiatives (such as Drishtee in India) but includes government projects that utilize computer centers to deliver services but that may not allow direct access to the computers (such as eSeva in India).

Variation in the geographical location of these initiatives is the key characteristic that I want to explain. I consider whether the project was implemented in urban vs. rural areas. In the case of ICT-enabled service centers, there is important variation across urban and rural areas in the cases under consideration (see Tables 3 & 4). This variation is more distinctive in India, where the states that have implemented projects have a more diverse urban/rural population than in South Africa, where the populations under consideration are predominantly urban.

<table>
<thead>
<tr>
<th>State</th>
<th>Project Type</th>
<th>Project Name</th>
<th>Launch date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>Rural</td>
<td>eSeva</td>
<td>1999</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>RSDP</td>
<td>2003</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>Rajiv</td>
<td>2005</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Project Type</th>
<th>Project Name</th>
<th>Launch date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gujarat</td>
<td>Urban</td>
<td>Civic Centres</td>
<td>2003</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>eGram/VIS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Project Type</th>
<th>Project Name</th>
<th>Launch date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamil Nadu</td>
<td>Rural</td>
<td>SARI/RASI</td>
<td>2001/3</td>
</tr>
</tbody>
</table>

**C. Temporal Context**

I consider a ten-year span starting in 1997 and ending in 2006. This cutoff point coincides with an Indian national government initiative to implement “common service centres” (CSCs) in all states. I focus only on those initiatives that were implemented previous to the CSC project and through the actions of state-level political actors. This distinction is different in South Africa, where the first initiatives were implemented by the central government; therefore I consider South African provincial activities in the context of preexisting national initiatives.

**III. EXPLAINING ICTS, EXPLAINING POLICY**

Attempting to understand the political drivers of variation in ICT-enabled services initiatives requires attention both to literature on ICT for development and to broader analyses of policy making in developing countries.

Analyses of ICT initiatives typically only hint at the role of politics in influencing outcomes, often referring to politics as one of many factors that may influence the success of these projects. Examples include Oestmann & Dymond who, in an overview of early telecenter experiences, note the importance of political will in overcoming many technical, economic and social barriers to public computer access initiatives [7]. Gaster [8] lists political support at the local and national levels as important to the success of a telecenter pilot in two districts of Mozambique. A review of telecenter initiatives in Latin America also considers the importance of government support when the state has a monopoly on the telecommunications industry [2]. Analysts of eGovernment initiatives almost invariably comment on the importance of political buy-in for successful project implementation [9]-[11]. In general, however, these analyses note the importance of politics or politicians without focusing on political incentives as a key explanatory variable of project outcomes.

A few case studies refer, almost tangentially, to the role of politicians in shaping the direction of ICT initiatives. Kiran [12] notes that the Akshaya telecenter program in Kerala, India originated in party and religious relationships between

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7 I rely in the analysis on the definitions of urban and rural used in the Indian and South African censuses, both conducted in 2001.

8 This table includes only projects in the three states under consideration, many similar projects have been implemented in other Indian states.
local district politicians and the state IT Minister. In a separate
analysis of Akshaya, Kuriyan and co-authors [13] find that
tensions between government goals and those of partner
entrepreneurs can place limits on the ability of either group to
achieve desired outcomes. Kaushik and Singh [14], in
comparing two private sector telecenter initiatives, consider
how differing relationships between these organizations and
local government representatives may have affected the
outcomes of the initiatives. None of these analyses places
direct emphasis on the role of politics in influencing the
character of government participation, thereby resulting in
minimal arguments about political causes or effects.

Political scientists provide some initial insights into the
links between political variables and the spread of ICTs in
general. Work by Milner [15] and Kalathil and Boas [16]
shows that authoritarian regimes have lower rates of Internet
penetration relative to democracies [15] and that this may be
in large part due to controls placed on the Internet by ruling
governments [16]. What these analyses do not do is examine
the causes of variation in ICT development within and across
democracies.

Analysts of Indian politics and policy-making in other areas
provide insights into factors that may account for state-level
that the party system in an Indian state affects development
policies. In particular, “states with two-party competition provide
more public goods than states with multiparty competition.”

Wilkinson [17] explains state government responses to
ethnic violence through an argument combining consideration
of party system type with attention to whether the ruling party
relies on votes from a particular social group (in his analysis,
minorities). He finds that “governments will protect minorities
when they rely on them directly for electoral support, or if
party politics in a state is so competitive that there is a high
probability that they will need to rely on minority votes or
minority-supported parties in the future.” Thus is it not enough
to know simply how competitive politics are in a state,
politicians will also take into account the expected response of
their particular support base to a given policy.

Both the Wilkinson and the Chhibber & Nooruddin analyses
depend on the effective number of parties (ENP)\(^9\) to
gauge levels of political competition in a state. While this is
often a reasonable measure, it does not capture relative levels
of competition within a state, such as the margin of victory in
a particular region. This is particularly important in India,
which operates on a single-member district, first-past-the-post
system where small shifts in regional vote patterns can result
in major changes in seat allocation. I take this into
consideration in my qualitative analysis of these state and
provincial cases by analyzing the relative strength of parties in
different parts of a state. The intuition here is that politicians
make policy decisions based at least in part on their
perceptions about where their vote base is strong and where
control of seats depends on a very small number of votes. I
focus on support from urban versus rural voters, anticipating
that variations in support from these groups will help to
explain party efforts, or lack thereof, to provide new ICT-
enabled services to constituents.

In each case discussed below, I evaluate two main electoral
characteristics: traditional support levels for the ruling party
from urban and rural areas, taking into consideration
urban/rural demographics, and recent levels of electoral
competition, including within-state variations. My argument is
that the combination of electoral competition and the
demographic support bases for the parties can help us to
understand the variation in policies on ICT-enabled service
centers. In sub-national units with low competition we should
not expect to see a service center project. In areas with high
competition the location of a project in urban or rural areas
will depend on the main support base of the ruling party.
Table 5 summarizes the expectations for policy outcomes
based on this argument.

### Table 5 – Electoral Characteristics & Expected Project
Types

<table>
<thead>
<tr>
<th></th>
<th>Low Competition</th>
<th>High Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Support Base</td>
<td>No project</td>
<td>Urban project</td>
</tr>
<tr>
<td>Mixed Support Base</td>
<td>No project</td>
<td>Urban &amp; Rural project</td>
</tr>
<tr>
<td>Rural Support Base</td>
<td>No project</td>
<td>Rural project</td>
</tr>
</tbody>
</table>

These characteristics can then be identified in the respective
cases, as shown in Table 6. Based on this mapping we would
expect to see no project in Gauteng, South Africa; urban-
oriented projects in Gujarat, India and the Western Cape,
South Africa; projects for both urban and rural users in
Andhra Pradesh, India; and a rural-oriented project in Tamil
Nadu, India. I will now discuss how these expectations map to
the detailed experiences in each of these cases.

### Table 6 – Case Electoral Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Low Competition</th>
<th>High Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Support Base</td>
<td>ANC/Gauteng</td>
<td>BJP/Gujarat, ANC/Western Cape</td>
</tr>
<tr>
<td>Mixed Support Base</td>
<td>(None)</td>
<td>TDP/Andhra Pradesh, INC/Andhra Pradesh</td>
</tr>
<tr>
<td>Rural Support Base</td>
<td>(None)</td>
<td>AIADMK/Tamil Nadu</td>
</tr>
</tbody>
</table>

\(^9\) Effective number of parties (ENP) is a standard measure of electoral
competition taking into consideration the number of legislative seats held by
each party or the number of votes received and is a weighted measure that
gives greater weight to parties holding a larger number of seats or receiving a
larger number of votes. ENP is calculated by the formula \(n = L \sum p_i^2\) where \(n =
the effective number of parties and \(p_i\) is either the proportion of seats or votes
received by each party in the state assembly or at the elections respectively.
IV. ELECTORAL COMPETITION AND ICT-ENABLED SERVICE CENTERS

A. India

From the perspective of information technology, India is most widely known for its impact on global markets in the software and services sectors. However, the use of these technologies within government is still limited. The national government itself only initiated a major ICT-enabled services initiative in 2005. As a result, many individual states have acted on their own to begin providing these services to their citizens. It is these state-level efforts that I now consider.

Gujarat

For more than the past decade the Bharatiya Janata Party (BJP) has dominated Gujarat politics. The party has held sole control of the Assembly and Chief Minister’s office since 1995, with only the Congress party providing a reasonable amount of competition. In 2002 the party won its third consecutive state assembly election. Because nearly all of the state’s ICT-enabled services initiatives stem from the post-2002 period, I focus on the dynamics of the 2002 election and characteristics of the party’s performance that could have potentially influenced subsequent technology initiatives.

From an urban-rural perspective the BJP has a much stronger base in Gujarat’s urban areas. In the 2002 state assembly election the party achieved a 22 percent margin over the Congress in urban areas while only winning by a 8 percent margin overall in semi-rural and rural areas [18].

While this shows substantial control over, and importance of, urban areas, Gujarat remains only 37% urban, ensuring that some attention must be given to the rural constituency. The importance of rural areas is increased by the fact that BJP rule in Gujarat also reflects considerable seat-shifting in consecutive elections. While the party has won elections on average by a ten-percent vote margin, the distribution of this margin across specific seats is highly variable. In the 2002 election, there was a shift in the regional distribution of BJP success. The party gained a significant number of seats in the central region of the state, but lost seats in all other regions of the state [19].

A large portion of this shift seems to be attributable to the public response to Hindu-Muslim riots occurring prior to the election. A Hindu-nationalist party, “the BJP managed to recover its eroding social base with carefully crafted and subtly executed politics of hatred...Anti-Muslim violence played a crucial role in this process of recovery, damage control and acquisition” [18]. The BJP’s success in 2002 depended in no small measure on public response to a particular incident and the aftermath, rather than its general ability to govern.

Indeed, the Congress is a true competitor in the state and capable of taking votes from the party, particularly in cases of failed governance by the BJP. Problems related to water scarcity in the Saurashtra and Kutch regions are seen as having contributed to Congress successes there in 2002 [18]. These analyses show that while BJP rule has been stable, in order to maintain power the party must find ways to reinforce its traditional support base while also reaching out to potential swing voters, particularly under the expectation that it may not have a Godhra-like event to rely on in subsequent elections.

In the context of ICT initiatives, these political necessities are reflected in the mixed stance taken by the BJP government. After 2002 the government, led by Chief Minister Modi, was keen to support initiatives that would benefit its urban support base. Building on the establishment in 2001 of a Department of Information Technology and Gujarat Informatics Limited (GIL), the nodal state IT agency, the government supported a major IT strategy initiative. This process determined focus areas for the GIL, one of which was eGovernment. A major project was put in place to support the establishment of urban “civic centres” to provide a range of government services to citizens in one location. The Ahmedabad Municipal Corporation implemented the first major project and additional centers are being implemented in other municipalities under the auspices of the Department of Urban Development.

A similar initiative was not concurrently promoted by the state for rural areas. The Ahmedabad district Collector’s office launched a project, but services are only available through the collector’s office and only a few services are digitized on the front-end while back-end processes are typically still completed by hand. All Collectors were later advised by the state government to implement similar projects, but few, if any, have done so. Observers note that this is apathy is likely because Collectors do not expect credit for implementing a project originated by someone else. But this contradicts the more successful outcomes in municipalities and perhaps instead reflects a lack of political will to enforce implementation in rural areas.

Currently, the GIL is implementing a Village Information System initiative to place computer kiosks in rural areas. This initiative builds on an earlier effort by the Panchayat Ministry to computerize Panchayat offices in rural areas, but expands the effort to introduce computer kiosks run by entrepreneurs that will offer both government and private services. Despite links to the Panchayat Ministry, the project is led by a bureaucrat within the GIL and seems to have little direct political support. Instead the success of the initiative is dependent on bureaucratic efforts to bring in external partners (such as the UNDP) to push the initiative forward.

The character of political support, or lack thereof, for rural initiatives in Gujarat seems to reflect a passive attitude taken by the government towards these efforts. The BJP is willing to let the bureaucracy act in areas that may benefit the rural electorate, but is not taking any major steps to support them directly. The BJP cannot ignore rural voters completely, but in the case of ICT initiatives the focus is more clearly on urban service delivery with any successful rural initiatives simply providing icing on the electoral cake.

Tamil Nadu

The political base of the ruling party is quite different in the case of Tamil Nadu. The AIADMK, which maintained power in the state after the 2001 elections, has a stronger rural support base than the DMK. In the 2001 election the AIADMK won dramatically across most regions. The DMK only showed reasonably in Chennai, gaining ten of its 22 seats from this single city, which houses 16% of the state’s urban
population. The AIADMK’s strongest base is in largely rural areas of Western Tamil Nadu. This combined with good performance in the south and central regions led to its substantial victory over the DMK. So, while the AIADMK does win seats in smaller urban areas of the country, the base it has created is largely rural, leading one analyst to note that “[w]ith AIADMK taking populism in politics to even higher levels in recent past, it is seen especially by the rural voters as a party that could provide some tangible benefits directly” [20].

This is important at a time when, as Kennedy [21] argues, the two major parties are in intense competition for “the political support of the state’s highly mobilized middle-lower castes and Dalits.” This is combined with the fact that new regional parties have emerged in the state over the last decade targeting lower caste groups. The result is increased competition for these groups for both the major parties.

This increase in competition makes it even more pertinent that the ruling party appeal to its traditional base through policy schemes in hopes of retaining, or regaining, their votes in future elections. Thus “[e]ach party has sought to cultivate a broad constituency with their own version of populist mobilization” [22].

This populist strategy is evidenced in the ICT-enabled services initiatives of the state. The first major initiative, Rural Access to Services via the Internet (RASI), was launched in 2003. This project aimed to place computer kiosks around the state to offer computer and Internet access, educational services, and eventually eGovernment applications. These centers were implemented through a dual partnership model with approximately two-thirds run by women’s self-help groups through the Department of Rural Development and one-third run by n-Logue, a private sector company that was already implementing its own computer centers in partnership with individual entrepreneurs. As of 2006 approximately 2,500 had been implemented across the state, with 1,600 being run by the self-help groups and 900 by n-Logue [23].

At the same time various departments within the state were working on implementing eGovernment initiatives, often in partnership with ELCOT, the state’s nodal IT agency. These initiatives have resulted in few ICT-enabled services for the average citizen. Even in rural areas where kiosks are operating, the back-end technology initiatives required to provide government services have not been implemented, thereby making efforts at front-end service delivery difficult, if not impossible [24]. In 2006 Government officials still felt that it would be a long time until eGovernment services became a major part of RASI center offerings [23].

With little electoral support coming from the capital of Chennai, the party had no incentive to promote urban initiatives that would likely benefit Chennai voters. While electoral competition is tight, the party’s strong rural base can provide enough support to win, thereby providing incentives to the AIADMK to reinforce this base. Thus, the party focused on reaching out to its poor, rural supporters with a technology services access initiative that was also intended to help local development through the promotion of women’s self-help groups and local entrepreneurs. This is consistent with the observation of Tamil Nadu politics that “upon taking office, each new ruling party typically initiates a number of social or development schemes targeted at specific groups. These schemes rarely withstand a change of ruling party, as each government is eager to create its own party-branded for of populism” [21].

Andhra Pradesh

Andhra Pradesh provides the most dynamic example of ICT-enabled services initiatives in this set of cases, with the dramatic efforts of Telugu Desam Party Chief Minister Naidu and a shift in strategy as Congress took over leadership of the state in 2004. The state is largely dominated by these two parties, with one or the other holding a majority of the assembly seats after each of the last three elections.

The electoral conditions prior to 2004 were in some ways similar to Gujarat. The TDP had become a powerful political party and had led the state for multiple terms. In 1999, incumbent Chief Minister Naidu and the TDP surprised analysts by winning a clear majority of the state’s assembly seats, despite only a 3% margin over the Congress. Pundits had predicted a loss, in part because “Mr Naidu’s talk of developing the state's infrastructure, build and promote [sic] information technology and the computer industry and the search for investment, has little resonance in the villages, though it impressed the aspiring middle classes in cities and towns” [25].

In contrast, the opposition Congress party approached the election by appealing directly to rural voters, “promising free electricity for two million farmers to run agricultural pumps” [25]. In a state with more than 70% rural population it might be expected that these electoral maneuvers would put Congress over the edge.

Analysts subsequently argued that it was other specialized schemes, such as savings programs for women, not considered in pre-poll discussions, which helped to keep the TDP in power [25]. Kennedy notes that “the TDP has shown remarkable continuity in running pro-poor social schemes,” and “this is part of the reason why the TDP can promote reforms without alienating these and other disadvantaged groups, including the poor among the dominant castes” [21].

This strategy did not pay off in 2004, when the TDP lost by a wide margin to Congress. Regional performance statistics of the TDP in 2004 are relatively consistent and “suggest that the roots of the disenchancement with the TDP were widespread, and its electoral loss was not caused by geographically correlated phenomena” [26].

The same is the case for TDP votes across urban and rural areas. Despite the fact that Naidu’s policies were perceived to be “pro-urban,” the party, in alliance with the BJP, won only one of the 27 urban assembly seats. As one analysis notes, while many policies seemed focused on urban areas, they may have benefited only the middle and upper classes in these areas. “Andhra Pradesh has a higher rate of poverty in urban areas than in rural ones, and the metropolitan election data suggest that the reforms failed to significantly improve the lot of the urban poor” [26].

The specialized rural policy initiatives that helped the TDP in 1999 were insufficient in 2004 as Congress “hammered away relentlessly” in the campaign on the notion that the TDP’s policies were harmful to the poor and middle classes,
responding again by promising pro-poor policies such as free electricity [26].

The technology policies implemented during these two periods map closely onto these general electoral strategies. The TDP government’s technology initiatives are well documented and began during his first term after the 1994 election. In addition to promoting the development of the state’s IT industry, Naidu took major steps to digitize government operations. The first ICT-enabled government services initiative was eSeva. This project (initially named TWINS) was launched in Hyderabad and Secunderabad in 1999. The initial set of 47 centers was increased to more than 200 by 2006 as the project was expanded to all municipal towns [27]. During the same period a state portal, called APOnline, was developed in partnership with Tata Consulting Services. This portal is accessible from dedicated kiosks or home computers and provides a set of mainly urban-focused government services.

In 2003, the government launched the Rural Service Delivery Point (RSDP) initiative, which attempted to build on pre-existing Public Call Offices (facilitated pay phones) to introduce computer and Internet access in rural areas. Initially these points were intended to serve as Internet access points, with the expectation that they could later be used to access government and other services, particularly through APOnline. This project resulted in approximately 900 RSD points in the state, or approximately one per 62,000 rural Andhra citizens. While this is a more aggressive and politically-driven rural initiative than we have seen in Gujarat, it is not as comprehensive as the RASI initiative in Tamil Nadu.

The same cannot be said for the Rajiv Internet Village Project, which planned 8,618 centers, or one for every 6,400 citizens. This project was launched in 2005 by the incoming Congress government and can be seen as a much more comprehensive effort to serve the rural population with ICT-enabled services. As one high-level Andhra Pradesh bureaucrat noted, the incoming government asked: “why should we confine service delivery to eSeva? There are 29,000 villages in the state that are not being provided services” [28].

After winning on a platform directed at rural voters, Congress responded by providing new services directly to these constituents. While both the TDP and Congress rely on almost equal percentages of urban and rural voters, Congress was better able to mobilize rural voters in 2004 and subsequently reward these constituents with targeted public goods.

B. South Africa

The story in South Africa is, in a sense, a simpler one. The country serves in many ways as a negative case, due both to the general lack of electoral competition at the national and sub-national levels and the low levels of ICT-enabled service delivery initiatives, despite early initiatives in the late-1990s. Because both cases considered here, the Western Cape and Gauteng, are considered almost entirely urban (90% and 95% urban respectively), we would only expect to see an urban-oriented project in an electorally competitive province. This expectation is in line with the findings in these two provinces. In the one province where there is ongoing electoral competition, the Western Cape, we also find evidence of a more proactive government in the area of ICT-enabled service delivery.

ICT for development initiatives began relatively early in South Africa, with a joint IDRC-national government project that began implementing telecenters through the Universal Service Agency in 1997. Over time this project met with limited success, having implemented just 65 centers by 2001, and the lack of both political will and administrative capacity are blamed for many of its problems [29]. As a result, there has been a persistent gap between the potential demand for ICT-access and what has been provided by the national government.

In terms of service delivery, the national government is also implementing a Multi-Purpose Community Centres (MPCC) project that brings together multiple government departments in one place to facilitate citizen access to services. Some of the MPCCs include a USA telecenter on the premises. These centers differ from what is observed in India, because in many cases the represented government departments do not have computers and Internet access to facilitate service delivery. The departments have been brought together in one place, but they are not ICT-enabled [30].

The Western Cape and Gauteng

In the Western Cape province, politicians have attempted to fill these gaps through their own initiatives. The Cape Gateway program was “central to the Provincial Government of the Western Cape’s (PGWC) efforts to introduce e-Government to the Province” [31]. The entire project involved a walk-in center, a call center, and a portal for providing government services. Those involved in the project soon realized that low levels of computer and Internet penetration in the province limited the project’s success at improving overall access to government services [32]. The government subsequently implemented computer access centers in provincial libraries, where people can access the government portal and other online services for free.

In Gauteng the government has implemented an eGovernment initiative that provides information on government services through a website with links to relevant government departments. The main difference between this initiative and that of the Western Cape, from the perspective of this analysis, is that the Gauteng initiative does not include the development of any computer center infrastructure from which individuals could access these services if they do not have personal computer access. Instead the provincial government depends on national initiatives such as the Universal Service Agency and the MPCCs to provide access.

In terms of electoral conditions post-Independence, the African National Congress has repeatedly won more seats than any other party the provincial legislature of the Western Cape. What sets the province apart from others is that two major parties and several smaller parties have repeatedly gained enough seats to threaten the ANC’s dominance. In 1994 the
National Party held 21 seats compared to the ANC’s 50, while the Democratic Party and Freedom Front won five each, representing approximately 24%, 58%, and 6% respectively. In 1999 the number of legislative seats was reduced from 86 to 42 and the ANC’s share dropped to 18 (43%) while the New National Party increased its share to 17 seats (40%) and the Democratic Party retained five seats (12%) while the Freedom Front won no seats. In 2004 the ANC gained one seat for 45% of the legislature, the New National Party dropped to 5 (12%), and the Democratic Alliance, a reformed Democratic Party, gained 12 seats (29%), while the new Independent Democrats garnered 3 seats (7%).

The general takeaway from these election results is that the Western Cape overall, despite being controlled by the ANC, is significantly more competitive than most other provinces. The range of legislative control in 2004 spanned from the ANC holding 70% of the seats in Gauteng to 92% in Limpopo. The single outlier is KwaZulu Natal, where the ANC held 47% of seats to the Inkatha Freedom Party’s (IFP) 37%. The ANC has been steadily gaining seats in KwaZulu Natal and 2004 was the first election in which it surpassed the IFP.

In the face of greater competition, the provincial government seems more attuned to the need to provide improved services to the public in order to maintain or increase its vote share. Whereas the Gauteng government is content to follow basic expectations of the national leadership in terms of eGovernment service development, the Western Cape government is more focused on ensuring that citizens see direct benefits from these initiatives. Providing access points that are clearly the result of provincial government actions offers an opportunity to more clearly showcase the contribution of government to public welfare.

V. CONCLUSION

Government efforts to improve service delivery through the use of information and communication technologies have been a major new area of policy initiatives in the last decade. Yet analysis of the political drivers behind these efforts has been limited, particularly at sub-national levels. In this paper I have attempted to respond to this gap through an analysis of the ways in which electoral conditions and incentives have affected the ICT-enabled services initiatives of Indian and South African sub-national governments. I found that government actors use these projects strategically in pursuit of particular electoral goals. As a result, the level of political competition, in addition to relative support from urban and rural voters, has played a role in political decision-making about where to implement centers to provide ICT-enabled services.

This finding is theoretically and empirically important. From the perspective of electoral analyses, it shows the benefit of combining basic analyses of electoral competition, such as

the effective number of parties measure, with a more fine-grained analysis of relative party strength in particular regions of a state. The relevance of sub-national electoral analyses to ICT policies is also new and relevant. Cross-national analyses provided initial insights into national ICT access outcomes, but applying theories of party systems and electoral competition to sub-national outcomes helps to explain the wide, but largely unexamined, variation observed in ICT initiatives within federalist countries.

Empirically, these are significant findings for analysts and practitioners in the realm of ICT and development initiatives. Continued efforts to reduce international and intra-national “digital divides” can be informed by the perspective that these divides are being continually produced, and reshaped, by the very efforts that attempt to reduce them. Politicians respond to electoral incentives and promote initiatives in one area of their political domain rather than another, resulting in non-universal access. While some individuals do gain access, differentiated access is produced concurrently at new levels. The outcome may be unavoidable in practice, but it is important to highlight this political driver in efforts to understand why some countries – and especially some regions within countries – have fallen behind in the digital era, while others have taken advantage of new technologies to provide crucial services to often-neglected populations.

REFERENCES


13 The New National Party is the new name of the formerly National Party. The NNP officially disbanded as a party in 2004 and most NNP representatives now fall under the leadership of the ANC.

12 While at a different level of analysis than that of states and provinces, it is also interesting to note that at the city level, the Cape Town government, led by the Democratic Alliance, implemented a computer and Internet access program in city libraries.


