

Political Incentives and Policy Outcomes: Who Benefits from Technology-Enabled Service Centers?

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Abstract—This study investigates the causes of variation in government policies to use information and communication technologies to improve service delivery to citizens. I ask why state governments in India vary in the number and type of services they offer to citizens through technology-enabled citizen service centers. I argue that politicians estimate the expected electoral benefits from providing improved services to citizens and weigh these benefits against the costs of increased government transparency and associated reductions in corrupt income. Politicians then design service center policies to maximize their chances of retaining power. Because levels of corruption and the characteristics of electoral competition vary across the Indian states, we see related variations in technology policies. These variations in policy, and in particular the services made available to citizens, have important effects on who benefits from citizen service centers. I use evidence from sixteen Indian states to test these arguments, and show that the character of the ruling government and the level of state corruption are robust predictors of variation in state-level technology policies.

Index Terms—Information and communication technology, development, India, corruption, politics.

I. INTRODUCTION

Why do some governments invest in new technologies while others do not? Why do certain governments implement full-scale reforms of public service delivery, while others do so in a superficial manner? The emergence of new information and communication technologies in the 1990s raised these questions in a stark way. Low-cost, digital technologies offered prospects for increasing the effectiveness of government, particularly through improved service delivery to citizens. International observers expected developing country governments, often criticized for failing to deliver services in an effective and transparent manner [1], to be the prime beneficiaries of new digital technologies [2], [3]. Developing country citizens were expected to benefit from improved

delivery of government services such as identity cards, birth and death certificates, and licenses; the supply of welfare and redistributive goods; and general government-citizen communication (see, *inter alia*, [4]-[6]).

Developing country governments responded to this opportunity and began to develop new systems for “eGovernance” and digital technology-based service delivery (see, *inter alia*, [7]-[12]). Yet, after more than a decade, the question remains whether governments have utilized new technologies to enable better service delivery to citizens.

In India, the main subject of this study, state governments in nearly all of the twenty major states had implemented policies to provide technology-enabled services to citizens by 2006.¹ These “technology-enabled service center” policies deliver public and private services² to individuals through the use of information technologies, in particular computers and the Internet, at dedicated local centers. These centers provide a “one-stop shop” environment for *multiple* government departments, thus streamlining the process by which citizens access an array of services.³

Yet the outcomes of efforts in India, and thus the benefits new technologies provide to citizens, differ tremendously across the states, in terms of both the extent and character of services provided. In the low-income states of Chhattisgarh and Orissa, the Chhattisgarh government provides nearly forty services, while Orissa offers fewer than ten. The types of services also vary, with states such as Andhra Pradesh providing a wide range of high-demand services, while others, including Uttarakhand, provide only a few low-demand services.

I argue that the observed variation in technology adoption, and the related benefits derived by citizens, result from the strategic calculations of political elites. Drawing on extensive sub-national analysis of technology policies in the Indian

¹ The constitutional allocation of responsibilities in the Indian federalist system makes sub-national state governments responsible for the provision of a majority of government services to citizens, rather than the national government. As a result, states are institutionally the most appropriate level for implementing service centers.

² Service centers often provide a mix of government services and services from the private sector, such as Internet access, digital photography, or telemedicine services.

³ While there may be related policies regarding service delivery via mobile centers or mobile phones, the policies studied here all involve service delivery at an immovable center through the use of information and communication technologies (ICTs).

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states, I posit that politicians attempt to utilize technology initiatives to maximize their chances of retaining power, but that these policies have both potential benefits and costs. Politicians evaluate the tradeoffs between expected effects on their political interests, especially their potential for reelection, of implementing new policies. When the balance of politicians' calculations differs across states, we observe variation in the policies these states adopt, and in the associated benefits for citizens.

This paper looks specifically at the ways in which electoral politics affect the services offered in Indian state service center initiatives. I argue that electoral incentives, as shaped by the combined effects of preexisting institutions of corruption and party competition, affect the number and type of services made available to citizens. I then test this argument using data on services in the sixteen Indian states⁴ that implemented technology-enabled citizen service center policies during the period from 1999 to 2006.⁵ The analysis is based on a new dataset of state service center policies that I developed during fieldwork in sixteen states, in addition to supplementary data collection. I utilize both quantitative and qualitative analytic techniques to evaluate the factors associated with variations in technology-enabled service provision across the states. After considering the details of my argument, I address trends in the number and type of services⁶ made available.

II. ELECTORAL INCENTIVES AND TECHNOLOGY POLICY

I argue that politicians will implement technology-enabled service centers, and specific services within those centers, when the expected electoral benefits from doing so outweigh the electoral costs. The benefits to politicians are not likely to differ dramatically across states. Politicians and parties can amplify the electoral benefits of technology policies by targeting services to their most important constituencies, yet because every incumbent should be able to benefit from such a strategy, the overall size of the electoral benefit of services reform should be similar for political incumbents across states.

The costs to politicians from service centers come primarily in the form of foregone corrupt income. In the preexisting process of service delivery, politicians use the machinery of the state to extract rents [14]. Yet in the Indian context they do so not simply for personal pecuniary gain but rather to enhance their hold on political power. In a cycle of

funds noted first in the literature by Wade [14], citizens pay bribes to bureaucrats, who then channel some portion of these funds to politicians, either in hopes of a job transfer or simply to satisfy a political boss' demands (see also [15]). Politicians then use a portion of these funds to finance future elections. As a result, any threat to this flow of funds is a threat to politicians' ability to secure reelection.⁷

I contend that the size of these costs depends primarily on variation in two key characteristics of the Indian states: the level of corruption and the cohesion of the ruling government. The level of corruption affects incumbent politicians' dependence on bribes as a source of campaign finance—the greater the share of bribes in overall campaign finance and thus the more dependent politicians are on bribes, the less supportive they will be of policies to increase transparency in service delivery. There is substantial variation in the level of corruption across the Indian states, with fewer than 20% of citizens in states such as Kerala and Himachal Pradesh encountering demands for bribes when interacting with government officials, while more than 60% of citizens Bihar or Karnataka have direct experience with bribing in multiple government departments [16].

The cohesion of the ruling government, by which I mean whether a single party or a coalition of parties rules in the state, can also affect costs. Coalition versus single-party rule is relevant because of the role that supporting minority parties play in the stability of coalition governments. When a large party requires the support of smaller parties to form a government, the lead party often allocates ministerial posts to its coalition partners in order to reinforce their support. In most cases, the incentive for holding a ministerial post is not control over policy, but access to the associated departmental rents. This is because ministers can demand a portion of the bribes collected by bureaucrats in their department during service delivery. Such rents provide a concentrated economic and political benefit to ministers, who can use these funds to finance re-election campaigns. When politicians consider the potential costs of new technology policies, ministers who control departments delivering a high volume of services to citizens—for example, Transportation—may then expect major costs from more efficient service provision.

From the perspective of a coalition member, a threat to this income is also a threat to the expected benefits of participating in the coalition. Moreover, minority partners in a coalition government typically reap only a limited, often disproportionately small, electoral benefit, as a party, from service center projects; credit instead tends to accrue to the larger majority party. Yet because minority partners are crucial to the survival of coalition governments, and because decision-making power is decentralized across ministers from all coalition parties, key supporting party ministers often have power to resist new technologies for delivering services. As a result, supporting party ministers have both potential

⁴ I consider only those states in which the state government implemented a service center policy, thereby excluding the Northeast states and Jammu & Kashmir, where the central government initiated a service center initiative, and the four remaining states in which no service center policy was implemented (Bihar, Goa, Jharkhand, and Madhya Pradesh).

⁵ In some states more than one service center initiative was implemented during the period under consideration, for example one in urban areas and a second in rural areas. In these cases I consider the overall services offered across all projects, omitting any overlapping services.

⁶ Evaluation of services requires an analysis of the services that are *stated* to be available versus the services that are *actually* available in the centers. While this is difficult to assess without visiting thousands of individual centers, a reasonable measure of available services can be made from a combination of site visits, interviews with project representatives, and reviews of associated websites.

⁷ My argument also extends discussions of India as a "patronage democracy" (Chandra, 2007; 2004) by focusing on how patronage and other funds come from corrupt, rent-generating activities by bureaucrats and politicians.

incentives to resist technology policies and important decision-making power within the coalition that they can use to influence policy outcomes.

In single-party ruled states, the concentrated costs for individual ministers are often outweighed by the overall electoral benefits of technology policy to the party. Single-party governments also place decision-making authority with a small number of individuals, in particular, in the government's Chief Minister. As leader of the party, the Chief Minister "internalizes" a large portion of the electoral benefit to the party of implementing service center projects. In single-party governments, the electoral benefits of implementing service center projects are concentrated, particularly for the Chief Minister, while the costs are in part diffused among Ministers and other individual Members of the Legislative Assembly (MLAs) who have limited capacity to resist the directives of the Chief Minister, due largely to party discipline.

In contrast to single-party governments, then, in coalition governments the political costs of service center implementation are concentrated in key decision-makers with the capacity to resist—or alter the character of—project implementation, while the electoral benefits are, from the perspective of these key decision-makers, diffused outwards. This logic suggests that the type of ruling government—namely, whether single-party or coalition—should then affect the character of new technology policies.

There is qualitative evidence for the importance of both corruption and ruling government cohesion in the choice of services to include in service center initiatives. In interviews with state level bureaucrats, representatives of states with low or average levels of corruption were more optimistic that the introduction of technology would be politically feasible. A bureaucrat from Orissa, a state with just below average corruption, when asked about resistance to service centers within government, noted that "There has been resistance, but we are slowly getting rid of it... People understand now that the story has gone past where they can stop it" [17]. Whereas an official from Haryana, a state with relatively high corruption, stated that, "many departments are not moving forward... with the implementation of front-to-back eGovernment services" [18]. He felt that this was largely due to the threat of increased transparency. For example, in "the Transport Department people in the department do not want to shift to a new system because they have established ways by which they are able to skim money off the top and they don't want to lose these sources of income" [18].

Analysts have also noted the importance of coalition governments for service center outcomes in individual state cases. Kiran [19] comments that a service center project in the state of Kerala "was opposed by the participating departments on account of the fear that they would lose their existing authority and power. This was particularly evident in Kerala, which is ruled by a coalition government, with different political parties in charge of different departments."

Thus the policy-making incentives for party leaders come from the potential electoral benefits of implementing "good governance" technology policies and the contrasting threats

from decreased corrupt income. I now consider the effects of these political incentives on the character of technology-enabled services.

III. CORRUPTION, COALITIONS, AND TECHNOLOGY-ENABLED SERVICE DELIVERY

A key question for an analysis of service center policies is which citizens actually benefit from introduction of these technologies. Because state governments are responsible for providing services to their entire population, if they offer technology-enabled services that benefit only a portion of the population, then they are failing to offer the same benefits to other citizens. Fig. 1 shows the variation across Indian states in the number of services made available to citizens.

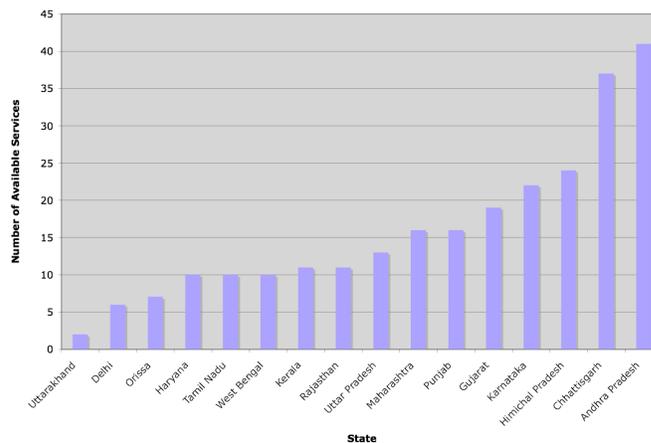


Fig. 1 – Available Services in the Indian States (2006)

My argument offers specific predictions for the ways in which politicians' calculations over the likely costs and benefits of technology policies may affect who benefits from these policies and to what degree. In cases where the expected costs from technology adoption are high, such as in states with high levels of corruption and in states ruled by a coalition government, governments are likely to implement policies in ways that serve fewer citizens overall.

A. The Quantity of Services

I evaluate the relationship between level of corruption and policy outcomes using a novel measure of state-level bureaucratic corruption, which is uniquely suited to testing my theoretical claims. This measure draws on a Transparency International survey of corruption in India [16]. The survey asked citizens about both their experience with corruption in acquiring services from government and their perception of corruption in government. Transparency International provides an indexed corruption score by state, based on eleven departments, including the police, municipal services, electricity, and the judiciary. I use this indexed score to develop my measure of bureaucratic corruption across the Indian states. The survey is particularly appropriate for the purposes of this analysis because it focuses explicitly on bureaucratic corruption in low-level service delivery, the area

targeted by service center policies, rather than the high-level corruption more often engaged in by top officials.

In states with high levels of corruption, the large anticipated costs from more transparent service delivery should discourage service provision overall, leading to fewer services than in lower corruption states. The cohesion of the ruling government should also affect service selection, as coalition governments are likely to resist the inclusion of supporting-party controlled services, leading to fewer services overall.

In this section, I discuss descriptive statistics, difference-of-means tests, and OLS models I use to evaluate these hypotheses. It is worth bearing in mind that the sample size is small: with only sixteen state cases, statistical power may be low. If I am able to uncover statistically significant relationships, it is because these relationships are particularly strong.⁸

Corruption

First, the level of corruption in a state is a strong predictor of the number of government services offered in computer-enabled service centers. The major findings of this analysis are presented in Table I. Among the states with below average bureaucratic corruption levels, the mean number of services offered is 20.1. This noticeably contrasts with the mean number of services offered in states with above average levels of corruption, which is 10.6. This difference is statistically significant at the .05 level. As noted above, any significant finding with only sixteen cases implies a particularly strong relationship between the variables under consideration.

A univariate regression model offers similar findings. The relationship between quantity of services and corruption, when corruption is measured on a scale from zero to one, is not statistically significant, but is in the predicted direction. When corruption is measured dichotomously, the relationship is significant at the .01 level (t-statistic of -3.22) (See Model 1 in Table III below).

Table I
Indian States, Corruption, and Quantity of Services

Corruption	
Below Average	Above Average
Absolute score: 240-478	Absolute score: 479-695
Scaled score: 0-.523	Scaled score: .524-1
Andhra Pradesh (41)	Delhi (6)
Chhattisgarh (37)	Haryana (10)
Gujarat (19)	Karnataka (22)
Himachal Pradesh (24)	Rajasthan (11)
Kerala (11)	Tamil Nadu (10)
Maharashtra (16)	Uttarakhand (2)
Punjab (16)	Uttar Pradesh (13)
Orissa (7)	
West Bengal (10)	
Mean services: 20.11	Mean services: 10.57
Difference in means: 9.54	(t-statistic = 2.07)

⁸ Statistical power, of course, is a function not just of the sample size but also the effect size.

Ruling Party Cohesion

The next relationship to consider is between the type of government and the quantity of services. Are single party governments associated with higher numbers of services? Here, the evidence is not as clear-cut. On average, states ruled by single parties do offer more services than coalition states; with a mean of 18.0 services while coalition states have a mean of 11.4 services. The difference between these two means however is statistically significant only at the .1 level. Given the small number of cases and the fact that the services do trend in the direction predicted by my argument, however, it is reasonable to believe that there is a meaningful relationship in the data between the quantity of services and the type of government. In the case studies below I discuss additional evidence for a relationship between government cohesion and services outcomes.

Corruption and Government Cohesion

Perhaps the more relevant test of my argument is an analysis of the relationship between corruption and government cohesion. The effect of corruption on the number of services is most evident in low corruption, single-party states. These states provide, on average, a larger number of services than any other states, and this difference is statistically significant.

The effects of ruling government cohesion and high levels of corruption are somewhat more difficult to parse, as the average number of service provided in high-corruption, single-party states is not statistically different from that provided in coalition-ruled states. Coalition-governed states provide fewer services on average than single-party states, regardless of the level of corruption in the state. Thus, based on this data, it is only possible to say that either coalition states will provide fewer services regardless of the level of corruption, or that high corruption states will provide fewer services than low corruption states regardless of ruling government cohesion. In order to provide greater clarity on the role of ruling government cohesion in service selection, I evaluate the specific services offered by coalition governments in detail below.

Table II
Mean Number of Services by Corruption and Ruling Government Cohesion

	Corruption	Ruling Government Cohesion		Difference in Means, Single Party - Coalition (t-statistic)
		Single Party	Coalition	
	Low	27.4	11.3	16.1 (2.87)
	High	10.2	11.5	-1.3 (-0.43)
Difference in Means, Low - High Corruption (t-statistic)		17.2 (3.04)	-0.2 (-0.06)	

Alternative Explanations

The length of time elapsed since a service center initiative was implemented might reasonably be expected to influence the number of available services. As governments in states that implemented centers early will have had more time to introduce additional services. The level of economic development might also be associated with provision of services, as states with higher incomes might have more funds available to invest in government reforms.

In order to test these alternative explanations, I used multivariate regression models to evaluate the relationship of level of corruption, ruling government cohesion, time elapsed since implementation, and state economic development with the quantity of services available in the states. As shown in Table III, the level of corruption shows a clear and robust relationship with the quantity of services, even when taking into consideration these alternative explanations. However the length of time since centers were initiated and the level of economic development in a state show no relationship with the quantity of services. Ruling government cohesion also does not show a statistically significant relationship with quantity of services, but as noted above this may in part be due to the small number of coalition states in the dataset.

Table III
Multivariate Analysis of Candidate Explanatory Variables

Variable	Model 1	Model 2	Model 3	Model 4
Constant	24.7	25.8	24.5	24.9
	(7.19)	(6.85)	(2.29)	(2.30)
Above Average Corruption	-14.0**	-13.7**	-13.3*	-12.4
	(-3.22)	(-3.12)	(-2.39)	(-2.17)
Ruling Party Cohesion		-3.5	-3.4	-4.2
		(-0.80)	(-0.75)	(-0.88)
Months Since Initiation			.02	.1
			(0.14)	(0.38)
State Domestic Product per Cap				-9.0
				(-0.86)
<i>N</i>	16	16	16	16
<i>r</i> ² _{adj}	.38	.37	.32	.30

Entries are unstandardized regression coefficients with t-ratios in parentheses. * $p < .05$ ** $p < .01$

B. Selection of Services

The benefits of computerized service centers to citizens depend not just on the quantity of services, but also on the character of the specific services made available. In this section I consider first whether high demand and high corruption services are made available in services centers across all states. I then consider the specific types of services made available in coalition-government led states.

The government of India, and in particular state governments in India, provides hundreds of services to citizens on a regular basis. Table IV lists the fifteen most commonly provided services in computerized centers across the states. Out of the 73 government services offered by at least one service center initiative, only these services are offered by more than 25% of the projects (shown in Table IV).⁹ I also include one service, ration cards, that is offered in 24% of initiatives, but is interesting to include in the analysis because it is provided by a different department, Food and Civil Supplies, than any of the other services.

Are these services in high demand by citizens? Based on Transparency International India's survey of corruption in public service delivery [16], only a small number of those services most needed by citizens are provided in computerized service centers. Of the top twenty-five services required by citizens, thirteen are offered in at least one state. However only six of these are among the services offered in at least 25% of states (highlighted in bold in Table IV). Thus, in many cases there is a disconnect between the services that are provided by states and those that are in high demand by citizens. This disconnect is most obvious in states with above average levels of corruption. High corruption states provide,

⁹ Birth and death certificates, which are offered by 62% of initiatives, is the only service provided in more than 50% of states.

on average, 2.9 of these thirteen services, while below average corruption states provide 5.2, a difference of means that is statistically significant at the .05 level. When the number of high demand services is regressed on the level of corruption, the relationship is in the predicted direction and significant at the .05 level (t-statistic of -2.33).

Table IV

Most Common Services offered in Indian Computer-Enabled Service Centers

Department	Service
Municipal Corp/Rural Dev	Grievances Birth & Death certificates Caste/tribe certificates Property tax payment
Food & Civil Supplies	Ration cards
Revenue	Land records Income Certificates Residency certificates
Electricity	Electricity bill payment
Telephone Company	Telephone bill payment
Water	Water bill payment
Transport	Driving licenses Vehicle registration
Home/Police	Arms license

Bold indicates that this service is one of the top 25 most demanded services by citizens, according to [16].

An alternative measure of citizen demand for service computerization is the estimated level of corruption in a particular service. Because bureaucrats are more likely to demand a bribe for some services than others, service reforms that have the potential to reduce corruption should provide greater benefits to citizens when introduced for services with a high likelihood of corruption. However reform of these services will also provide the highest costs to bureaucrats and politicians in terms of lost income, and so computerization in high-corruption potential services should be least likely in high corruption states.

When we consider high corruption services, separate from their overall demand by citizens relative to all services, states with higher levels of corruption are less likely to provide these services through computerized service centers. As seen in Table V, below average corruption states are much more likely to provide services associated with bribe payments than states with above average corruption levels. Out of the six most corrupt services, only one, land records, is available in any of the above average corruption states.

Table V

Availability of High Corruption Services in Indian Computer-Enabled Service Centers

Reason for Bribe	Est. Annual Bribes (\$ '000)	% of States Offering	< Average Corruption States	> Average Corruption States
Police First Info. Report	458,000	13%	2	0
School Fees (exemption)	340,000	0%	0	0
Rural Financial Loan	313,000	0%	0	0
Register Property	307,000	50%	5	3
School Certificate	288,000	0%	0	0
Electricity Connection	166,000	13%	2	0

Estimated annual bribe value based on Transparency International India data [16] and author's calculations.

In the case of coalition-led states, I also expect to see effects of electoral considerations on the specific services that are chosen for inclusion in centers. Services controlled by supporting members of a coalition government should be less likely to be included than those services controlled by the majority party.

Figure 2 provides an overview of service provision in coalition-led states. As shown in this graph, politicians from the smaller, supporting members of a coalition are more likely, on average, to acquire ministerial posts that involve control over services commonly offered in service centers. This is in line with expectations that supporting coalition members will demand ministerial appointments in departments with high levels of government-citizen interaction. However, when supporting coalition members control these services, it is less likely that they will be included in service centers, as seen from the right side of the graph. In the case studies below I consider the specific ways in which allocation of ministerial posts is linked to these lower levels of service provision.

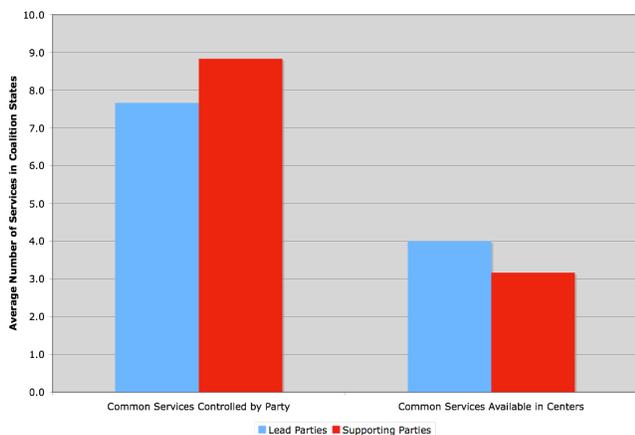


Figure 2 – Average Service Provision in Coalition States – Lead vs. Supporting Parties

Kerala

I begin the case discussion with Kerala. This state is viewed by many as an innovator in both development in general [20] and ICT-enabled development in particular [21], [22]. Despite below average income per capita, Kerala has the highest literacy rate in the country and the highest overall human development index [23], [24]. Kerala also applied its development strategies to the use of technology and was one of the first states to use IT to reform service delivery (Kurian, 2003).

Yet the services offered in Kerala's two main service center initiatives, FRIENDS and Akshaya, pale in comparison to many of their counterparts in other states. Through FRIENDS centers, only ten government services are offered, with just three offered in Akshaya centers. Could coalition politics be at least partly to blame for the low quantity of services in Kerala?

As noted above, analysts have pointed to the importance of coalition dynamics in shaping Kerala's service center initiatives [19]. Once the first service center initiative was approved, the FRIENDS initiative, the ruling Left Democratic Front (LDF) continued to wield their influence over the shape of the centers. This coalition was led by the Communist Party of India (Marxist) (CPI(M)), with its coalition partner the Communist Party of India (CPI) holding the next largest number of seats in the state assembly during the period from 1996 to 2001. The coalition in total held 76 seats, five more than the necessary majority of 71. Ministerial posts were allocated across coalition members, with the largest number of ministries predictably allocated to the CPI(M).

Six of the fourteen most common services were made available through the FRIENDS centers: electricity bill, telephone bill, water bill, property tax payment, driving licenses, and vehicle registration. Of these services, two of the relevant departments were overseen by supporting coalition members, the Water Department and Transport, led by the Revolutionary Socialist Party (RSP) and an Independent member of the legislature, respectively. Because the RSP held only five assembly seats and the independent, by default, held

only one, neither of the two ministers from these parties had the power to bring down the coalition government on its own: even defection by all five RSP ministers would leave the coalition with 71 seats, sufficient to maintain its majority. The remaining services offered through FRIENDS centers were delivered by departments overseen by CPI(M) ministers.

Among the common services not offered through these centers, two key departments, Revenue and Food & Civil Supplies, were overseen by the CPI, the only party with enough assembly seats to threaten the stability of the ruling coalition. The other relevant departments, Local Administration and Rural Development, were both led by representatives of the CPI(M). The lack of services offered by departments under the CPI(M)'s most important coalition partner aligns clearly with predicted outcomes.

The Akshaya project, a second computer-enabled center initiative in Kerala, offers a similar story of coalition politics, with an interesting twist. The Akshaya initiative was launched under the United Democratic Front, a Congress Party-led coalition that came to power in 2001. In this coalition the Congress held the largest number of seats, at 62, but needed the support of one or the other of its two main coalition partners, the Muslim League of Kerala or the Kerala Congress (M), to reach the magic number of 71 for a majority.

Akshaya was launched in 2003 through a pilot project in the state's Malappuram district. The stated goal of the initiative was to increase access to technology for the citizens of Kerala, and a key part of the initiative was computer literacy, or "e-literacy," for the head of every household, a goal that mimicked Kerala's well-publicized success in boosting traditional literacy rates (www.akshaya.net).¹⁰ But these centers provided an additional opportunity for the delivery of government services, as noted by those affiliated with the project [25]

Overall, however, the Akshaya project has implemented next to no services through its network of what in 2008 is more than 1,000 rural centers. Only three common government services are on offer: electricity bill payment, telephone bill payment, and grievance redressal. The Electricity Department is overseen by a Congress minister, and the Department of Rural Development, which would oversee grievances in the rural areas where Akshaya centers are located, is headed by a representative of the Kerala Congress (M).

While it is surprising that the KC(M) would have one of their services offered through the Akshaya centers, it is perhaps more telling to note the number of services overseen by the Kerala Congress (M) that are *not* offered through these centers. During the UDF government, the KC(M) was in control of both the Revenue Department and Rural Development, which together account for six of the remaining commonly offered services, none of which have been provided through Akshaya. Other coalition parties controlled the departments overseeing nearly all other common services,

¹⁰ At nearly 91%, as measured in the 2001 Census, Kerala has the highest literacy rate of any Indian state or Union Territory.

with the Kerala Congress (Jacob) and the Kerala Congress (B) overseeing Water and Transport, respectively. Congress ministers oversaw only two common services that were not offered via Akshaya, arms licenses and ration cards.

For a portion of these services, the lack of provision through Akshaya is even more surprising, as these services had already been implemented at the district level in FRIENDS centers. Thus even though the basic infrastructure was in place to extend water bill payments, property tax payments, driving licenses, and vehicle registrations through Akshaya outlets, this was not done under the Congress administration. This means that citizens must either go to the district FRIENDS office or avail of these services through traditional department-based offices, which are still be prone to any corruption in the system.

The twist in the Akshaya case is the way in which the policy itself was used as a tool to target the core voters of a key coalition member party. The Malappuram district where the pilot project was initiated has a largely Muslim population, and the Muslim League is the dominant party in the region [26]. When the UDF coalition regained power in 2001, a prominent member of the Muslim League, Shri. P. K. Kunhalikutty, became Minister for the Information Technology Department.

According to analyst reports, the Minister subsequently consulted with representatives of Malappuram and determined that information technology could be a “real enabler of the local economy” [26]. In order to facilitate IT use, a plan was developed by the local government to provide for computer literacy in the district. This plan was subsequently modified in coordination with the Kerala State IT Mission, under the oversight of the IT Minister, and realized as a “telecenter” initiative for the district [26]. If successful, this pilot would then be extended to other districts in the state. So while the stated intention was to develop an initiative that could eventually benefit the entire state, the initial benefits would clearly be centered on the core constituency of the standing IT Minister, representing a key ruling government coalition member.

Akshaya, then, provides an important example of the combined effects of coalition rule. First, a second computer center initiative in the state was launched for the apparent purpose of rewarding key Muslim League constituents, a clear boon for the holder of the IT Ministry post. Second, the lack of services offered through Akshaya reflects the prevalent use of ministerial posts by the UDF government to reward coalition members. Even those services that should be relatively easy to implement because of their inclusion in the earlier FRIENDS initiative have, for the most part, not been made available to Akshaya patrons.

Karnataka

The next state, Karnataka, has a much higher level of corruption than Kerala, which would, on its own, imply a stronger emphasis among coalition members on the economic side-benefits of ministerial posts. But Karnataka is also a “hard” case, because it is one of the most technically advanced

states in the country, with the IT hub of Bangalore as its capital.

On the face of things, Karnataka has also been at the forefront of using ICTs in service delivery. The Bhoomi land records initiative received more media attention than most initiatives in the country, and the former Secretary for eGovernance, Rajiv Chawla, is widely recognized as a father of the Indian movement to incorporate information technologies into Indian government processes. Yet, as we will see, even the presence of early initiatives and an important evangelist do not guarantee de-politicized service delivery in the state.

A major service center initiative, Bangalore One, was initiated under the coalition government of the Congress Party and Janata Dal (Secular) (JD(S)) in 2005. This particular government was formed despite the fact that the BJP held the largest number of seats in the assembly, because the BJP was short of a majority and could not agree to a coalition with other parties to acquire a majority [27]. So while the Congress has the greater number of seats in the coalition, it is highly dependent on the support of its JD(S) partner.¹¹ Bangalore One was launched in partnership with the municipal government in Bangalore and was intended to provide a similar one-stop government services environment as offered by Andhra Pradesh’s eSeva initiative [28].

In the case of Bangalore One, however, despite multiple years of experience with technology-enabled service delivery, many of the most commonly offered services are not available. Of the three services that fall under the domain of the Revenue department—residency certificates, income certificates, and land records—none are offered in the Bangalore centers. The exclusion of land records is especially surprising, given that the Bhoomi land records initiative was viewed as such a ‘success’ in the state.

Why are these common and highly valued services not offered in Karnataka? The most plausible answer again lies in coalition politics. The minister in charge of Revenue was a politician from the supporting JD(S), who also held the post of Deputy Chief Minister, and so was clearly an important player in maintaining the coalition. Ration cards are also unavailable in the centers, and it was a minister from the JD(S) who oversaw the responsible Food & Civil Supplies department. Of those common services that were offered, the JD(S) was responsible for only one, electricity bill payment, while the Congress was responsible for the remaining services, via Municipal Administration, the department that was also involved in the implementation of the initiative itself. So even in a state with a strong emphasis on technology and history of government IT initiatives, the dynamics of corruption and coalition politics seem closely linked to the selection of specific services made available in the state’s one-stop centers.

Rajasthan

¹¹ The coalition eventually collapsed in early 2006, when a rebel JD(S) leader, H.D. Kumaraswamy, pulled out of the government with a group of other JD(S) MLAs in order to form an alternative coalition with the BJP (Rediff, 2006).

In Rajasthan, the LokMitra (urban) and JanMitra (rural) centers were opened in early 2002 under the leadership of the Indian National Congress party. During this period the Congress party held a majority of the seats in the state assembly and so did not require the support of any other parties in a coalition. The initiation of service centers was largely an enterprise of the Chief Minister Ashok Gehlot, who sent representatives of the state to Andhra Pradesh in 2001 to evaluate the eSeva initiative there and determine how something similar could be used to improve service offerings to citizens in Rajasthan [29]. According to one of the bureaucrats who participated in that mission, a decision was made to improve on the Andhra model by offering services in both urban and rural areas, through two separate initiatives, at least at the beginning.¹²

The choice of services in each set of centers was then determined based more on urban versus rural needs, with the LokMitra centers focused on bill payments and JanMitra centers emphasizing grievances and non-government services such as agricultural prices. However, in rural areas only four government services were offered, while in urban areas just seven services were made available.

The availability of specific services, particularly in urban areas, seems directly linked to the interests of the Chief Minister. When bureaucrats in charge of implementing LokMitra services attempted to convince various departments to provide their services in the centers, they faced significant resistance. The state telephone company did not want to allow outsourcing of its bill payments through the computerized centers, and the bureaucratic officers found it necessary to request the intervention of the Chief Minister. In this case the Chief Minister did intervene and the Telephone company was forced to provide services for bill payment through the LokMitra centers. On other occasions, however, such as in the case of income tax payments, the Chief Minister was unwilling to take similar initiative and income tax payments were not included in the services offered by the centers [29].

The mixed response of the Chief Minister in the case of Rajasthan may be closely tied to the high level of corruption in public service delivery in the state. As one bureaucrat involved in the initiatives noted, politicians “want to provide the maximum services to their vote bank, ... [but] they also want money for the next election” [29]. Thus from the perspective of the Chief Minister, by providing some services, especially those that do not typically involve high levels of corruption, such as bill payment, there is an opportunity to reap some political benefits from the centers. At the same time, those services that may more often involve the payment of bribes, such as income tax, can be restricted from inclusion in the centers in order to maintain the rents from those services. In this way we can see how high levels of corruption may affect service delivery in single party states.

Chhattisgarh

The final case to consider is Chhattisgarh, a single-party-led state that has below average levels of corruption in public

service delivery. The state of Chhattisgarh was formed in the year 2000 when it was carved out of Madhya Pradesh. Despite below average levels of economic development and a persistent and violent separatist movement in part of the state, the Chhattisgarh government has implemented a substantial eGovernment program through its Choice service centers. These centers, which to date are largely located in urban centers, provide one of the largest sets of services of any state in India.

Why is it that Chhattisgarh has implemented such a robust service center initiative? Here again we see the important role played by Chief Ministers in the character of public service reforms. Choice service centers were initially implemented under the first Chief Minister of the state, Ajit Jogi of the Indian National Congress. However the growth of the project from a pilot stage has occurred under BJP Chief Minister Raman Singh.

According to government officials associated with the Choice initiative, Chief Minister Singh encouraged an inclusive decision-making process in which the bureaucrats in charge of major citizen-facing departments would participate in an “empowered committee” that was tasked with making all key decisions about the project moving forward. The goal of this model was to ensure consensus on decisions so that no participants would later attempt to block implementations of the centers or any specific services [30]. In addition, the Chief Minister took over leadership a “governing council” made up of government ministers, which is responsible for overseeing the implementation of the project. This meant that the implementation team could go directly to the Chief Minister in case of any problems with implementation. In no other state, other than perhaps Andhra Pradesh, has the Chief Minister taken on this type of direct oversight role in the development and implementation of service centers.

What factors might have influenced the Chief Minister to take such a strong position on eGovernment in the state? Corruption does exist in Chhattisgarh, but government representatives argued that the expectation of the Chief Minister was that improvements in service delivery would provide a greater potential electoral boost to the ruling government than any threat from reduced access to rents. “The Chief Minister sees the benefits as greater than the costs. He has been the brainchild behind all of these frameworks. Indian politicians... have very sharp political minds. The Chief Minister in this term is focused on good governance, on accountability, transparency, and responsiveness of the government” [31]. Given the difficulties that the government otherwise faces in areas of development and social stability, it seems that the Chief Minister has adopted service reforms through the use of technology as an important platform for delivering valued goods to citizens. This is possible, at least in part, because he does not likely feel the same threat to campaign resources from increased government transparency that exists in higher corruption states.

IV. CONCLUSION

The evidence presented here provides strong support for an argument about the role of corruption and coalition dynamics

¹² JanMitra and LokMitra were merged into a single initiative, eMitra, in 2004. Both Jan Mitra and Lok Mitra are Hindi variations on the term “people’s friend”.

in affecting which citizens benefit from technology-enabled service delivery. Citizens in more corrupt states are less likely to benefit from new technologies. This is because even if service centers are implemented in their state, these centers are likely to provide fewer and lower demand services than those centers in other states.

Citizens may also be at a disadvantage depending on the characteristics of their ruling government. In coalition-led states, state governments will choose services that ensure the stability of the government *before* considering what services might benefit voters. When MLAs from supporting parties serve as ministers for departments, the services of those departments are less likely to be implemented, particularly if that party holds enough seats to disrupt the majority of the coalition.

Who benefits from technology-enabled service centers is thus highly dependent on the political characteristics of a state and in particular the extent of corruption and cohesion in the ruling government. While there may be great potential to improve service delivery through one-stop service centers it is clear that, at least to date, the actual benefits to citizens are politically driven and thus, in the case of the Indian states, highly varied.

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