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The e-government paradox in post-Soviet countries

The
e-government
paradox

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Abstract

Purpose – The purpose of this paper is to investigate the emergence of e-government in post-Soviet countries using Kazakhstan as a case study. Extant research on e-government in developing countries highlights significant benefits including improved public services, reduced corruption, and more open and inclusive government. The paper asserts the presence of an e-government paradox which limits its potential to improve public services.

Design/methodology/approach – Primary data were collected from a number of sources: 6 focus groups with central government agencies, local authorities and civil society organisations; 25 structured and semi-structured interviews; and participant observation.

Findings – The research finds evidence of an e-government paradox in five forms: an emphasis on technological development; transactional services are faster but have displaced attention from core public services; petty corruption has been reduced but grand corruption remains; isomorphic mimicry; and greater participation by citizens has been limited.

Research limitations/implications – The focus of the research is Kazakhstan. Applying the lessons learned to other post-Soviet countries has limitations given their different stages of development since independence.

Practical implications – The key practical implication of this research is that countries can become absorbed by e-government technology without questioning the fundamental business model which underpins how public services are delivered. Ultimately, this impacts on the social value of e-government.

Originality/value – While existing research has examined how e-government has been implemented in developing countries, this paper focusses on Kazakhstan as an authoritarian state with wider implications for post-Soviet countries.

Keywords Kazakhstan, E-government, Post-Soviet countries

Paper type Research paper

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Introduction

Public services improvement is a significant component in the agenda of developing countries, not least because citizens judge the progress of development through the lens of better education, healthcare, social welfare, public housing and so on (Knox, 2019). Improvements in key public services often give citizens a greater sense of well-being and awareness of a better quality of life. One important aspect of the public services improvement agenda is the use of electronic government, about which many advantages are offered (Weerakkody *et al.*, 2012). For developing countries, the persistent issue of corruption can be reduced, at least in part, through removing personal transactions between officials and service users. Citizens witness faster, more efficient, services that avoid several exchanges of documents with multiple state agencies that may have different and complex bureaucratic requirements. Technical developments in electronic government are opening up new linked services using personal data gathered from service users. Children registered at birth, for example, can be allocated kinder garden and school places, allowing better strategic planning by state agencies.

Using a case study of Kazakhstan, this paper examines what we describe as the “e-government paradox”. Here, we suggest that post-Soviet countries select legacy issues of



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pervasive bureaucratic processes and corruption to persuade international development agencies that e-government is a panacea when, in reality, there is research evidence of significant failures or as Heeks (2002, p. 1) put it starkly “most information systems – including current ICT projects – in developing countries fail either totally or partially”. The aim of this paper is to investigate the features, attributes and consequences of the e-government paradox. The paper is structured in three parts. First, we locate the process of e-government, as part of a wider public services improvement agenda, in the research literature. Second, we offer an in-depth analysis of the e-government paradox in Kazakhstan, a country which has achieved significant success in the international rankings and is being used as an exemplar to benchmark other developing countries. Third, we consider possible explanations for the e-government paradox and ways to ameliorate its consequences more widely in post-Soviet countries.

E-government research in developing countries

The World Bank defines e-government as:

The use of information technologies that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions. (World Bank, 2015a, p. 1)

Important in the detail of this definition is the use of the word “**can** serve a variety of ends; resulting benefits **can** be less corruption [...]”. Such caveats underline the potential limitations of e-government for transitional economies (Mahmood, 2013). Heeks (2003), for example, claimed that most e-government projects in the developing world fail because of what he described as the “design-reality gaps”. Following the analysis of 40 e-government case study countries, he concluded that only 15 per cent could be deemed to be successful. Specifically, he defined some 50 per cent of the e-government projects as partial failures due to the fact that “the major goals for the initiative were not attained and/or there were significant undesirable outcomes” (Heeks, 2003, p. 2).

Dada (2006) in reviewing the literature on the application and implementation of e-government in developing countries is doubtful about claims of early success and concurs with Heeks’ assessment (see also Dominguez *et al.*, 2011; Knox and Janenova, 2019). He draws on the work of several scholars specifically highlighting that e-government on its own will not lead to better governance in developing countries (Ciborra, 2005; Ebrahim and Irani, 2005). It is not a panacea for problems such as corruption, rent seeking, distortions of the market and the absence of democracy. Instead, a “service delivery state” is needed “**before** (our emphasis) e-government can be implemented within it” (Dada, 2006, p. 3).

Of specific relevance to the research in this paper, Brimkulov and Baryktabasov (2018) examine e-government development in the Central Asian States (see also Bowe *et al.*, 2012). They identify Kazakhstan as the leader in e-government development within the region which is linked directly to the fact that it has the strongest economy in Central Asia (Janenova and Kim, 2016; Bhuiyan, 2011). However, Brimkulov and Baryktabasov (2018, p. 150) conclude: “In Kazakhstan the country specific model of ‘alternative access’ service delivery was not able to implement in-depth changes in the work of the public sector and improve service quality”. Comparing Russia and Kazakhstan, Zherebtsov (2016) identified important differences between these two countries in the pace and level of development of e-government. He argued that “Kazakhstan was able to achieve a deeper penetration of information and communication technologies into administrative practices than Russia” mainly because of political commitment at the highest level, including the president of Kazakhstan (Zherebtsov, 2016, p. 20).

More generally, the World Bank offers a cautious assessment of e-government in developing countries. It points to success in India, Sri Lanka, Brazil, Chile, Romania and South Korea but argues that it is “too early to judge the macro impact of e-Government on overall development and towards achievement of the Millennium Development Goals (MDGs) in developing countries [...]” (World Bank, 2015b, p. 2). Yet, even with the experiences of using e-government in developed countries, claims made for better governance were being questioned. Bekkers and Homburg (2007) argued that to suggest e-government would create “a new and better government” was a myth. Baldwin *et al.* (2012, p. 105), in their study of public servants experiences of e-government in New Zealand, argued for a more considered view of the costs and benefits to “provide a useful antidote to much heated rhetoric and ‘dangerous enthusiasms’ exhibited across the world” (see also Goldfinch *et al.*, 2011). Goldfinch (2007, p. 917) was more emphatic when he argued “the majority of information systems development are unsuccessful. The larger the development, the more likely it will be unsuccessful”. In an in-depth study of New Zealand Gauld *et al.* (2006, p. 13) write of the “overwhelming ubiquity” of IT project failure in the public sector.

In summary, existing research suggests three basic findings, which range along a spectrum, on the introduction of e-government in developing countries. At one end of the spectrum, there is some evidence of an association between the introduction of e-government and good governance particularly in reducing corruption, improving trust between state and citizens, and greater government transparency. Progressing across the spectrum, e-government should be seen as part of a wider public sector reform agenda which tackles institutional weaknesses, historical and cultural barriers to change. At the other end of the spectrum, e-government merely entrenches state control and limits public services improvement to state–citizen transactions that are discharged through bureaucratic documents and ignores more important human/social services which have a disproportionate impact on the quality of people’s lives in developing countries.

E-government in Kazakhstan

Kazakhstan is a Central Asian country which gained independence from Russia in 1991 and is the largest landlocked country in the world, about the size of Western Europe, but with a relatively small population (18.04 m). It has borders with China, Kyrgyzstan, Russia, Turkmenistan and Uzbekistan and will be a key route in the One Belt, One Road initiative. It has achieved significant economic success moving to become an upper middle-income country in two decades largely through its natural resources base. Despite being an authoritarian state, it is viewed as a progressive governance reformer in the region. The e-government programme was launched in Kazakhstan following the decree of the president in 2004 to fulfil three key objectives: to provide fast access to public services; to improve public services’ effectiveness through the widespread use of ICT in the public sector; and to minimise personal contact between customers and government officials in order to reduce administrative corruption.

Existing research confirms not only the significant achievements of Kazakhstan but also the challenges it faces (Bhuiyan, 2011). In the post-Soviet countries (excluding the Baltic States), Kazakhstan is now considered as a leader in terms of e-government progress as well as one-stop-shops. Kassen (2016) explained this success as a combination of traditional executive directives, top–down administrative commands and centralised public funding. All of these allowed Kazakhstan “to achieve impressive results in the sphere, which eventually helped to universally propagate the nation as a promising model to follow for other developing countries” (Kassen, 2016, p. 53). And, certainly an exemplar for other post-Soviet countries. However, we argue that this “success” fails to acknowledge the paradox of e-government, the features, attributes and impact of which we explore empirically.

Methods

The methods used for the study comprised several waves of primary data collection: 6 focus groups, 25 interviews and participant observation with central and local government officials, civil society organisations and the business sector (see details in Table I). Collecting data in Kazakhstan (and other Central Asian countries) is particularly difficult for a number of reasons. Central government bodies tend to be highly legalistic and closed in terms of access to information, most of which would be readily available in western countries. They require formal letters of invitation from researchers which can take a long time to process, are suspicious of their motives, and unwilling to engage in any criticism lest it results in “punishment” and negatively impacts on their career progression. There are also methodological concerns about the internal and external reliability of the qualitative data presented in the research. In terms of the latter, replication studies might well test the

Method	Target group	Composition
3 focus groups	Central government agencies; local-level akimats; civil society and business sector organisations ($n = 65$ participants in total, with around 20 participants in each focus group)	Representatives from central-level government bodies: Civil Service and Anti-Corruption Agency, General Prosecutor's Office, Supreme Court, and several ministries Local-level akimats from across Kazakhstan Civil society including the organisation Sange which conducted research on e-government during 2015 and 2017; the National Chamber of Entrepreneurs Atameken; and NGO Informational Fund
11 unstructured interviews/informal conversations	Government officials from 11 post-Soviet countries	Informal interactions and unstructured interviews were conducted with government officials responsible for e-government in the following countries: Armenia, Azerbaijan, Belarus, Georgia, Estonia, Moldova, Mongolia, Kyrgyzstan, Russia, Ukraine and Uzbekistan. The data gathering took place during a two-day workshop on Sharing Kazakhstani Best Practice in Public Service Delivery in Astana city organised by UNDP/Astana Hub of Civil Service
14 structured interviews	Follow-up interview with select number of focus group participants	Mid-level managers from the following key stakeholder government organisations. Civil society activists in the field of e-government (Soros-Kazakhstan Foundation, Civil Alliance, NGO Profi-T, Zertteu Research Institute, Sange and Atameken) Four deputies of the Majilis of the Parliament
3 additional focus groups Participant observation	State, civil society participants from rural area ($n = 35$ in total) Citizen state interaction in public service centres	Focus groups local government officials and NGOs in Uralsk city, West Kazakhstan region Longitudinal participant observations of customer interactions at one-stop-shops (or public service centres) during the period of 2007–2017, as well as participant observation of the work of the Situational Centre – a surveillance technological system to control over 300 one-stop-shops through constant video and audio recording

Table I.
Primary data collection

features of the e-government paradox outlined in this research. Internal reliability is less problematic given that the data were collected via a small team and hence there was an agreement on what was seen and heard. Recorded interviews and observations limit the issues of internal reliability but can also act as a deterrent to the “truth” (the problem of socially desirable responses). Core questions for our research participants included, but were not limited to, the following:

- (1) Kazakhstan has achieved significant initial success in e-government but this appears to have waned (according to international metrics) – why is this?
- (2) Has e-government improved public services for the citizens of Kazakhstan?
- (3) Has e-government reduced corruption in Kazakhstan?
- (4) Is e-government part of a wider good governance agenda (specifically open government) in Kazakhstan?

Focus groups and interviews were conducted in Russian or occasionally in the Kazakh language and proceedings were recorded with the permission of participants. Given the volume of data generated in two languages and the high costs of translation, transcription into English was selective (with potential selection bias). To mitigate against bias, the design was triangulated using a mix of methods: interviews, focus group, observation and documentary evidence. Data were also gathered through cross-case studies interviewees (11 post-Soviet countries) and rival explanations were actively considered. The researchers used text data content analysis (sentiment analysis) available in Excel. They coded the same data independently and discussed minor variations in interpretation. Data quality checks were made for evidence of bias and deceit. This resulted in inter-coder agreement of approximately 85 per cent. To mitigate against researcher effects, the core research questions (listed above) remained central to the data gathering process despite opportunities for exploring tangential areas of enquiry. Qualitative data analysis software such as NVivo is not available in the Russian or Kazakh languages.

Our data gathering process followed the sequence set out in Figure 1.

Data analysis

The qualitative data were distilled using sentiment analysis into various nodes or themes from the interviews within two broad categories (or cases): government officials; and, civil society and the business sector. Those nodes that were common to both groups constitute the features of the e-government paradox. Government officials and civil society and the business sector discussed five common themes (nodes): technology, transactional services, mimicry, corruption and open government. We unpack the features and attributes of the e-government paradox in Table II. Peripheral nodes were those themes discussed separately by the two key groupings (cases). Examples of such themes from civil society and business were: the awarding of government procurement contracts; increased controls on the activities of civil society; and limited funding

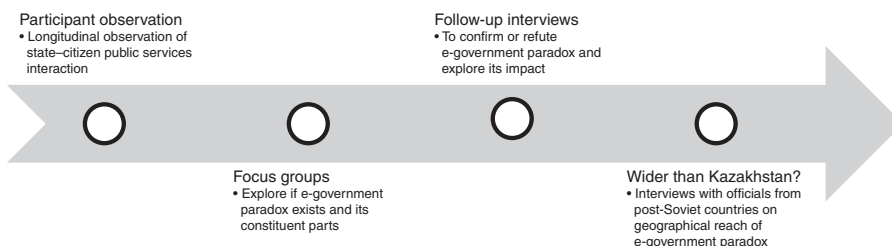


Figure 1.
Data
gathering process:
e-government paradox

Features of e-government paradox	Attributes of e-government paradox
“Freeze all but the technology” (Heeks, 2003)	Evidence of more efficient public services (faster turnaround of processes) but no better quality. Citizens gain time but there is little added value
Transactional rather than transformational public services	Ever-increasing technology investment prioritised over core services such as clean drinking water, poverty alleviation and good healthcare Focus on transactional services which are conducted through the medium of documents, and lend themselves to electronic exchange. This supersedes attention to transforming social/human services where there is a greater need for improved quality
Isomorphic mimicry	Pressure from international organisations to use e-government as a mechanism to improve state–citizen relations and movement towards democratisation
Limited impact on corruption	Tackles petty corruption but grand corruption continues beyond the boundaries of e-government
(Half)-open government	E-government agenda may be considered a part of wider open governance agenda that can threaten autocratic governments which seek to limit its potential

Table II.
The e-government paradox

for NGOs. Examples from government officials were: the role of Kazakhstan as a leading reform country in Central Asia; Presidential endorsement of e-government; the “abuse” of e-government to monitor the behaviour of officials; and, poor salaries of civil servants.

We explore each of the features of the e-government paradox (Table II) through our empirical investigation, drawing on the empirical data, below.

“Freeze all but the technology”

The experience of “freezing all but the technology” as a key feature of the e-government paradox refers to the impetus for technology innovation, the latest and most expensive equipment, and a penchant for digital superiority amongst neighbouring countries. A core pillar of Digital Kazakhstan (2017, p. 5), for example, is transformation of the state’s infrastructure through “ground-breaking technologies to provide services for the business sector and general population”. One of the key projects cited under the thematic area “transformation to a digital state is e-Health” promises: artificial intelligence in terms of diagnosis and management of treatment plans; mobile health and remote consultations; and, e-health passports for the citizens of Kazakhstan. This, when doctors are poorly trained, lack basic equipment, are badly paid and, as a result, engage in corrupt practices to supplement their incomes.

In some ways, the increasing emphasis on e-government as the “solution” to improving public services merely compounds the status quo – its builds on existing inefficient practice and simply digitalises the process. This results in an ever-increasing list of public services which government attempts to deliver electronically and “success” is measured by the number of services which have been digitised. A civil society focus group participant noted:

There is a kind of e-government totem pole or barometer of success which is based on a crude numbers game that Ministries play. The objective of this game is that year-on-year government officials boast about the increase in the number of public services that are now digitized. There are two problems with this approach. The services that they boast about are very marginal to citizens and there is no real improvement in the service, just a poor service delivered faster. In the increasing rush to move up the totem pole, Ministries select “easy” services to digitize but with limited user interest. It’s a bit of a joke really. We have no clean drinking water from our taps and our public hospitals are dreadful yet we are boasting about *Digital Kazakhstan*. We’ve lost sight of what is important for citizens. These are optics for international consumption because Kazakhstan wants to become one of the top 30 developed countries by 2050.

The unintended consequence of “freezing all but the technology” is that we simply reinforce existing inefficiencies – too many needless documents, and back office state agencies protecting inefficient processes and their own bureaucratic roles therein.

Citizens may experience a faster turnaround in the exchange of documents needed to receive a public service but the business processes which underpin the transaction between provider and user remains largely unchanged. The focus therefore shifts to technological innovation rather than the fundamentals of the service, the workflow design and its improvement for service users. This constitutes one key feature of the e-government paradox. The paradox is more acute in developing countries which are autocratic because the state–citizen relationship is asymmetric in favour of the state. Service users remain largely passive with limited options to exercise voice in holding public bodies to account for poor public services. The paradox here is that while developing countries compete to emulate technological developments equivalent to developed nations, they neglect investment in core public services such as clean drinking water, food security, and basic education and health services.

Transaction rather than transformation

This feature of the e-government paradox links directly to the transactional nature of the ways services are defined and provided in post-Soviet countries. Services typically rely on documentary exchange, official stamps, and ambiguity around how public services are defined. In OECD countries, public services are broadly defined as those services which are paid for from the public budget and delivered through government bodies or contractually via the private or third (NGO) sectors. However, there is ambiguity in what constitutes “public services” in Kazakhstan and, more widely, in CIS countries. In Kazakhstan, as well as in other CIS countries, public services are defined as those services which require an exchange of documents (registration of car, issue of birth certificate or passport, land registration, etc.). The definition of public services is highly legalistic and convoluted. For example, Article 1 of the “Law On Public Services” in Kazakhstan (5 April 2013: No. 88-V) provides the following definition (translated from Russian):

Public service is one of the forms of implementation of separate state functions performed individually by a request of service recipients and aimed at implementation of their rights, freedom and legal interests, provision of appropriate material or non-material benefits to them.

This narrow but complex definition ignores the bulk of “human services” (social services for western readers) which consume most of the public budget (health, education, social welfare, housing, etc.), and those which impact most significantly on the quality of people’s lives. These “human services” are considered by the Kazakhstani legislation as “state functions” and therefore beyond the remit of e-government.

The register of public services, a legal document enacted in 2013, includes a list of public services which are delivered through one-stop-shops and e-government system, and is increased on an annual basis. Some public services included in the register are popular and in high demand by citizens such as issuing birth/marriage certificates or a driving license, registration of property transactions, checking pension payments and registering in a queue for public housing. However, some listed public services may raise legitimate questions about their value to the citizens, for example, issuance of certificates for the right to manage self-propelled small boats; registration of persons engaged in missionary activities; and state registration of rolling stock. There are still plenty of services which are left outside the scope of the register of public services. One interviewee captured this systemic limitation as follows:

Our laws determine which public services come within the scope of e-government. Essentially those are services which are transacted via the exchange of documents. Human (social) services such as health, education and social welfare are not mainly transacted through documents and hence are marginalised in the rush to digitization. This is crazy when you consider how important these are services to people. We’ve become obsessed with technology and have lost sight of citizens’ basic welfare needs.

Electronic government is now an end in itself to the exclusion of other human or social services. Hence the emphasis is on increasing technical solutions but in a way which fails to question the need for the exchange of documents. Rather, e-government has become a mechanism for the more efficient transaction of documents in an electronic format largely based on process indicators. Consider the following examples which are provided electronically or through one-stop-shops: putting a child up to seven years of age into a queue for child care organisations; making an appointment with a doctor; and registering on a waiting list for social housing. The number of these process tasks that are completed allows public service providers to report “success” informed by a “tick-box” mentality, while ignoring key outputs and outcomes indicators.

As one NGO interviewee noted:

The problem is that many functions on the public services list are partial, meaning that they don't represent the service as a whole. For example, there is a service of applying to be included on the waiting list to get a place in the kindergarten, but there is no service of actually issuing a place. Another example is booking an arrangement to see the doctor, but no mention of actual service delivery (medical care itself) [...] It looks like we are too focused on the convenience of registration of documents and convenience of reporting on services, rather than on the completeness and quality of services on offer.

Hirschheim and Newman (1991) warned against treating information systems development information such as e-government as a technical process and ignoring the social process involved. Failures in information systems development happened because “they have been too narrowly conceived” (p. 30).

Isomorphic mimicry

Post-Soviet countries are being actively encouraged by international organisations to not only adopt e-government, but also to move beyond it towards more inclusive government, a form of isomorphic mimicry aimed at emulating western style liberal-democratic practice (DiMaggio and Powell, 1983). Some scholars have described the concept of e-government as part of a wider agenda leading to greater democratisation (Perri 6, 2004). Large donors such as the World Bank, UNDP, OSCE, European Union and the Asian Development Bank have stressed the need for greater inclusiveness in the decision-making process by citizens as a condition of funding good governance initiatives. Focus group participants, particularly government officials, expressed concern about this wider goal:

While we see the merits of e-government in improving services to our citizens particularly when it comes to reducing corruption and the faster exchange of documents, we don't want it to be a means of threatening the stability of our country. We have seen colored revolutions in Georgia, Ukraine and Kyrgyzstan. We are proud that Kazakhstan is a peaceful country with many ethnic groups living harmoniously. There should be no political agenda with e-government.

In addition, the increasing use of information technology and the spread of social media have seen citizens find channels to express their criticisms of state practice. While there are examples of inclusive government practice emerging in some post-Soviet countries, the omnipotent state is still the norm. Kazakhstan wants to join the OECD and has a strategic goal to become one of the top thirty most developed countries by 2050. To do this, the OECD has “encouraged” Kazakhstan to move well beyond its current attempts at e-government.

For example, an OECD report on Kazakhstan noted:

E-government initiatives are a driver of inclusive growth as they form the foundation for inclusive institutions that offer broad citizen participation, plurality and a system of checks and balance which, in turn, provide better access to services. (OECD, 2017, p. 42)

Encompassing this wider agenda, the OECD suggests four core principles which should underpin the growth of inclusive government: citizen engagement; transparency; accountability; and, integrity. Operationalising these principles requires: access to public services through e-government; open portal; and service to citizens' initiatives. But it also involves a much wider brief: stronger civil society; more inclusive decision-making; access to information (law and practice); freedom of the press; and, anti-corruption measures. While some of these measures are palatable in authoritarian states, others are not. One civil society interviewee noted:

E-government must confine itself in Kazakhstan to a public services reform agenda. If it is part of a wider political agenda, particularly where international donor organisations are seen to be driving greater inclusivity, then the state will push back.

Johnson and Kolko (2010, p. 36), in their research on Kazakhstan, Kyrgyzstan and Uzbekistan warn us that “authoritarian governments can manipulate the medium of the Internet and that the simple presence of e-government sites does not represent a more accountable, transparent, or responsive government”. E-government, according to government officials in our research, should not therefore be seen as a Trojan horse for democratic government in Kazakhstan and other post-Soviet countries. A key feature of the e-government paradox is that it is an example of isomorphic mimicry criticised by some scholars as a “key technique of successful failure” which will limit post-Soviet countries in building real capability for context-specific reform (Andrews *et al.*, 2017, p. 85).

Impact on corruption

E-government has played an important role in tackling corruption largely due to reducing or obviating the need for official–citizen interface where bribes are commonplace. This appears to be the case not just for Kazakhstan but also across post-Soviet countries. Using data from the Worldwide Governance indicators on the control of corruption and UN e-government index from 2003 to 2018 across 15 post-Soviet countries, we examined the relationship between e-government and the control of corruption. The data show a strong positive correlation (0.610) between control of corruption and e-government and a co-efficient of determination of 0.37. This indicates that 39 per cent of the variance in the control of corruption is explained by e-government.

We shared these data with our focus groups participants who corroborated the empirical findings. One participant captured a widely expressed view:

We shouldn't underestimate the improvements achieved. You couldn't imagine how bad it was before. For each simple service we had to give bribes and wait very long. Now, with the transfer of services into electronic format we have significantly reduced administrative corruption and the waiting times to receive services. It is a huge success.

While the empirical evidence indicates a significant correlation between the control of corruption and e-government in 15 post-Soviet countries, data on Kazakhstan is less positive. For example, in Transparency International Corruption Perceptions Index (2017), Kazakhstan is ranked 122 out of 180 countries. Similarly, using the Worldwide Governance indicators (see Figure 2), Kazakhstan has shown marginal gains in the control of corruption since 2006. This would suggest that e-government has been more successful, given the limitations associated with the legal parameters of public services, in tackling petty rather than grand corruption.

Here again, participants in our research confirmed these empirical findings. The following view was widely shared:

Yes, e-government removes that face-to-face contact with government officials intent on extracting tenge (Kazakh currency) from ordinary citizens but the big corruption scams still continue. Look at how we have just shuffled along at the bottom of the corruption indices with no real signs of significant improvements in countries like Georgia, for example.

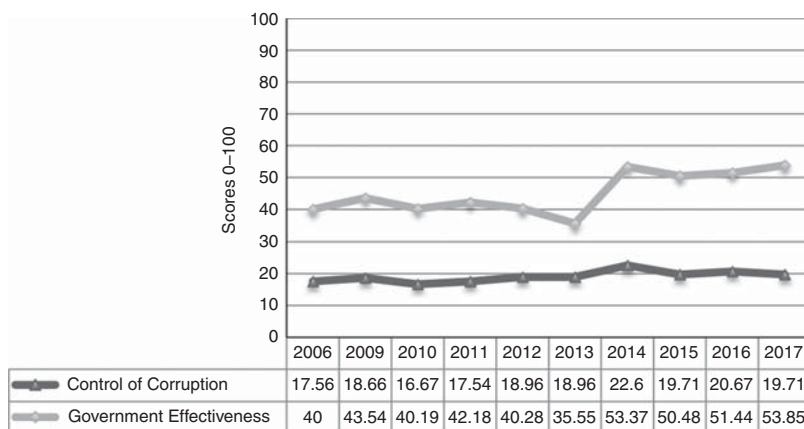


Figure 2.
Kazakhstan –
governance indicators

Source: Worldwide Governance indicators

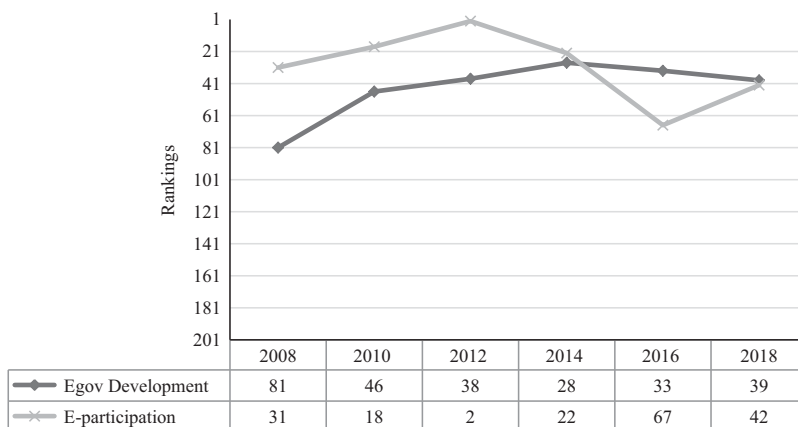
Sheryazdanova and Butterfield's (2017) research on the impact of e-government on corruption in Kazakhstan supports this view. They argue that e-government initiatives had some effect on reducing the level of petty corruption in Kazakhstan; however, "they do little to curtail oligopolistic behavior, particularly in the state-owned business sector" and "must be part of a larger package of anti-corruption measures backed by the political will to implement them" (2017, p. 91).

The indicator "government effectiveness" (Figure 2) captures the quality of public services. While there was a spike in performance in 2014, which may be explained by e-government services, the situation has plateaued as the limitations of digitisation unfold. Hence aspirations in *Digital Kazakhstan 2017–2020* to improve the quality of life of Kazakhstani citizens may well exemplify the e-government paradox.

(Half)-open government

Focus group participants were given some basic background information on the success story of e-government in Kazakhstan. In 2012, Kazakhstan was acknowledged by the UN as a "leader in e-participation" and placed in second position (out of 193 countries) in terms of e-participation along with Singapore, behind only two developed countries, the Netherlands and South Korea (see Figure 3). This was in recognition of the government's attempt to engage with the public through the open government portal which provided information in five major areas: open data; open legislative acts; open budgets; performance assessment of government bodies; and open dialogue. In particular, the open dialogue component presented a platform for interactions between the government and citizens through blogs of ministers and akims. Interactions between citizens and state bodies included: comments on specific government policies, participation of citizens in the opinion surveys and a platform for recording complaints.

These rankings would suggest not only the delivery of e-services but also a wider open government agenda where active citizen engagement and commentary on laws, decrees and orders were a welcome feature. In short, a move in the direction of e-democracy. Early warning signs were perhaps evident in the UN e-government survey findings following the flurry of success in 2012. Thereafter, Kazakhstan has witnessed a sharp fall to 67th and then an improvement to 42nd position in 2016 and 2018, respectively. E-participation, according to the UN, is about improving citizens' access to information and public services. It is also about promoting participation in public decision-making.



Source: UN E-Government Survey Data

The
e-government
paradox

Figure 3.
UN e-government
survey rankings:
Kazakhstan

Presenting these metrics to focus group participants prompted several responses. Most argued Kazakhstan's open government portal had failed to promote active citizen participation. Rather, it presents an imitation of engagement between the government and citizens, while unofficial platforms such as social media and, in particular Facebook, became popular as a vehicle of mostly one-way communication from citizens to government. One participant noted:

The idea of an open government portal offers a positive image of ministerial blogs, open budgeting, and sharing data on the performance of government bodies. The reality however is that much of this is window dressing. If you look at any Kazakh Ministry website they are stuffed full of legalese which the average citizen has little or no interest in. All of this is to give the appearance of openness – much of it is to appease international development organisations.

This kind of behaviour is described in the literature as “the formal structures of organisations reflecting the myths of their institutional environments instead of the demands of their work activities” (Meyer and Rowan, 1977, p. 341).

There was a similar reaction from focus group participants on Kazakhstan's performance in the e-government development ranking (Figure 3) which captures, inter alia, provision of online services. Undoubtedly, Kazakhstan saw a significant increase in services first offered through one-stop-shops and subsequently via online services. This was captured by a focus group participant as follows:

E-government, particularly the introduction of one-stop-shops, represented a whole new way of citizens interacting with government bodies in Kazakhstan. There was initially some “low-hanging fruit”, services that were easy to digitalise (driving licenses, passports, birth certificates/registration etc). Once these had been done, it was always going to be more difficult to maintain the momentum for change.

There is also a level of distrust amongst government officials about international metrics, not least the UN e-government development index which is based on a survey of national websites and how e-government policies are applied. Focus group government officials argued that reviewers examine post-Soviet countries such as Kazakhstan with preconceived ideas about its historical roots:

These international metrics are viewed with suspicion – we know what it is really like on the ground. As far as I know this e-government development index is a relative measure which simply means that other countries could have improved, not that Kazakhstan is getting any worse. We know the adage about lies, damn lies and statistics here in Kazakhstan.

Civil society participants were less sanguine and one NGO representative was particularly critical of what she described as “parallel services”. She claimed that ministries had never really integrated back office services in one-stop-shops and hence there was significant duplication because of territory protection:

The first wave of e-government did not really threaten ministerial fiefdoms as one-stop-shops were more like signposting organisations. To progress further however demands ceding functions. Ministries don't like that and hence they run parallel services – face-to-face delivery and digital services. This is why Kazakhstan has peaked in e-government.

Despite political support for e-government at the highest levels, there remains a reluctance to transition from a rather limited definition of electronic services to a wider open government agenda, ultimately leading to e-democracy, and all of the potential consequences for an authoritarian state. Civil society participants described the current situation as “half-open” government and a key feature of the e-government paradox. In short, if e-government became synonymous with open government, then autocratic regimes will pull back.

Discussion

So, what explains the e-government paradox? Our fieldwork suggests a number of factors but the overarching explanation is that Kazakhstan craves international respectability, despite being an authoritarian state, and wants to be seen as a serious actor on the world stage. In that sense it is Janus-faced. Its outward-facing policy, explicitly stated, is to become one of the top 30 developed countries by 2050 and, hence, many of its formal public policies must “read well” in the international arena. For example, it is working with the OECD and spends a large amount of money on technical support from their experts with the ultimate aim of becoming an OECD member state. It is a member of the United Nations, the first Central Asian country to join, and was elected as non-permanent member of the UN Security Council (2017–2018). Through a multi-vector foreign policy, it has assumed geo-political significance with Russia and China in the East, most recently as a key player in the One Belt One Road initiative, and the USA and European Union in the West. It also maintains cordial relations with the Islamic world. Kazakhstan began a member of the OSCE and chaired the Organisation of Islamic Conference. Most recently, Kazakhstan became a member of the WTO in 2015, hosted Expo in 2017, a major worldwide future energy event, and has facilitated or mediated peace building talks on international conflicts (Russia and the Ukraine; Russia and Turkey; and Syria).

Kazakhstan's inward facing policies contrast with this international image of a progressive state. The strategic policy Digital Kazakhstan 2020 typifies the contradictions and exemplifies the e-government paradox. It projects an image of having highly efficient modern public services when the reality is that publicly funded schools and hospitals are low quality, mired in bureaucracy, corrupt and centrally controlled by Ministries. Given the low tax burden on citizens (typically 10 per cent) and legacy in post-Soviet countries of weak accountability in a one-party state, public service users have no effective voice in calling providers to account. So, although e-government reduces the interface between bureaucrats and end users, it ignores or cannot address fundamental problems of core public services which depend on personal or human provision. While Digital Kazakhstan is heralded as an example of a progressive state to the international community it does little to tackle the systemic failure of poor service provision and low quality of life for Kazakhstani citizens. Some 77 per cent of the population has access to the internet but this reduces significantly in rural areas which constitute 45 per cent of all citizens. This digital divide can only add to the e-government paradox with the momentum to increase the number of services available online and inaccessibility of one-stop-shops for rural dwellers. Moreover, the potential use of social media and “open”

government platforms (euphemistically titled Government for Citizens) as a way of giving citizens a voice on poor public services has been limited by connectivity issues, prosecutions against internet users accused of “extremism”, and new amendments to the law on information and communications which restricts anonymity online by mandating website commentators to register (Freedom House, 2018). In short, e-government, rather than a tool for improving the quality of people’s lives, represents another mechanism to control the population, stifle opposition, and punish those who might voice criticism that could be perceived as destabilising. In that sense, e-government has become a paradox. When e-government through, open reporting, threatens to expose the political elite’s role in grand corruption, then punitive measures ensue. For example, the courts used defamation laws to remove online content related to an investigation of Zeinulla Kakimzhanov, a businessman and former top government official. The online publishers were ordered to pay KZT 50m (\$160,000) in damages to Kakimzhanov (Freedom House, 2018).

What, if anything, could be done to tackle the e-government paradox? Suggestions go to the heart of addressing post-Soviet legacy issues through systemic measures which can only be progressed incrementally. Kazakhstan, like many authoritarian states, suffers from a weak civil society which could use e-government to call government to account, not only for poor public services but also control and punishment tactics synonymous with the Soviet regime. Kazakhstan is currently considering joining the Open Government Partnership (OGP) which brings together government reformers and civil society leaders to create action plans that make governments more inclusive, responsive and accountable (Open Government Partnership, 2018). As a pre-requisite to joining, the Kazakhstan Government must endorse an Open Government Declaration that includes a country action plan developed with public consultation, and report independently on progress in the plan. The declaration includes a specific reference to increasing access to new technologies for the purposes of openness and accountability: “We intend to harness technologies to make more information public in ways that enable people to both understand what their governments do and to influence decisions. We commit to developing accessible secure online spaces as platforms for delivering services, engaging the public, and sharing information and ideas” (Open Government Partnership, 2018, p. 12). If Kazakhstan were to join the OGP, then fulfilling such a commitment would directly address the worst excesses of the e-government paradox. A small number of independent NGOs are advocating for the Kazakhstan Government to join the OGP. The business sector also has a role to play. Increasingly, key business transactions utilise e-government to: register their business online; perform due diligence checks on business properties for sale; and, enforce commercial contracts through the court system, to name a few examples. There is the potential for a much greater range of online services and the business sector could mitigate the negative image of e-government by extolling its wider benefits in doing business in Kazakhstan. The government, in turn, could work more closely with the NGO and business sectors to promote e-government as a virtue to be used to facilitate open government, partnership working and public accountability, rather than being most closely linked with repression and consolidating authoritarianism. A potential positive externality is that Kazakhstan, seen as a leader in public sector reform in Central Asian, could influence the development of e-government as a tool to facilitate a greater citizen participation and inclusive government amongst its neighbouring counties, all of which are deemed to be “consolidated authoritarian states” (Freedom House, 2018).

Conclusions

Moving beyond the parameters of Kazakhstan, particularly in post-Soviet authoritarian states, e-government is legally and politically circumscribed to a narrow range of public services and a concern that it promotes an international agenda which leads inexorably to e-democracy.

The latter carries with it expectations of more deliberative processes of decision making with greater citizen engagement, a stronger more embedded civil society, greater access to information and a free media, many of which are anathema to authoritarian states. The e-government paradox not only displaces a concentration on “human (social) services” in education, health and social welfare but, more fundamentally, can be seen as a western model that ultimately promotes open government and, in so doing, challenges the core values of some post-Soviet countries.

The political economy context of post-Soviet countries is conducive to the e-government paradox for three main reasons: there is less scrutiny of public services because citizens witness extractive industries, where they exist, paying taxes to provide state functions and are less inclined to exercise a scrutiny role; there are systemic limitations in holding the state to account where countries are authoritarian or semi-authoritarian regimes; and, citizens are more passive or less vocal given the limits on freedom of assembly and voice in a number of post-Soviet countries. Weaker institutional structures therefore allow “progress” in public services delivery to be confined to e-government, ultimately protect political elites engaged in grand corruption, and avoid those functions which consume most of the public budget (education, health and social welfare), but are more likely to impact on the quality of people’s lives. Getting one’s passport renewed electronically and with fewer visits to state agencies is useful but fails to address significant problems in human (social) services. The e-government paradox, in sum, is part of the Soviet legacy that will remain until wider systemic issues of opaque government, endemic corruption and lack of inclusion are addressed.

References

- Andrews, M., Pritchett, L. and Woolcock, M. (2017), *Building State Capability: Evidence Analysis, Action*, Oxford Scholarship Online, Oxford.
- Baldwin, J.N., Gauld, R. and Goldfinch, S. (2012), “What public servants really think of e-government”, *Public Management Review*, Vol. 14 No. 1, pp. 105-127.
- Bekkers, V. and Homburg, V. (2007), “The myths of e-government: looking beyond the assumptions of a new and better government”, *The Information Society*, Vol. 23 No. 5, pp. 373-382.
- Bhuiyan, S.H. (2011), “Trajectories of e-government implementation for public sector service delivery in Kazakhstan”, *International Journal of Public Administration*, Vol. 34 No. 9, pp. 604-615.
- Bowe, B., Freedman, E. and Blom, R. (2012), “Social media, cyber-dissent, and constraints on online political communication in central Asia”, *Central Asia and the Caucasus*, Vol. 13 No. 1, pp. 144-152.
- Brimkulov, U. and Baryktabasov, K. (2018), “E-government development in the Central Asian states: best practices, challenges and lessons learned”, in Alcaide, L. and Rodríguez, M. (Eds), *International E-Government Development*, Palgrave Macmillan, London, pp. 121-154.
- Ciborra, C. (2005), “Interpreting e-government and development efficiency, transparency or governance at a distance?”, *Information Technology & People*, Vol. 18 No. 3, pp. 260-279.
- Dada, D. (2006), “The failure of e-government in developing countries: a literature review”, *The Electronic Journal of Information Systems in Developing Countries*, Vol. 26 No. 1, pp. 1-10.
- DiMaggio, P.J. and Powell, W.W. (1983), “The Iron cage revisited: institutional isomorphism and collective rationality in organizational fields”, *American Sociological Review*, Vol. 48 No. 2, pp. 147-160.
- Domínguez, L.R., Sánchez, I.M.G. and Gallego Álvarez, I.G. (2011), “Determining factors of e-government development: a worldwide national approach”, *International Public Management Journal*, Vol. 14 No. 2, pp. 218-248.
- Ebrahim, Z. and Irani, Z. (2005), “E-government adoption: architecture and barriers”, *Business Process Management Journal*, Vol. 11 No. 5, pp. 589-611.

- Freedom House (2018), "Freedom on the net", available at: <https://freedomhouse.org/report/freedom-net/2018/kazakhstan> (accessed 15 December 2018).
- Gauld, R., Goldfinch, S. and Dale, T. (2006), *Dangerous Enthusiasms: E-Government, Computer Failure, and Information System Development*, Otago University Press, Dunedin.
- Goldfinch, S. (2007), "Pessimism, computer failure, and information systems development in the public sector", *Public Administration Review*, Vol. 67 No. 5, pp. 917-929.
- Goldfinch, S., Gauld, R. and Baldwin, N. (2011), "Information and communication technology use, e-government, pain and stress amongst public servant", *New Technology, Work and Employment*, Vol. 21 No. 1, pp. 39-53.
- Heeks, R. (2002), *Failure, Success and Improvisation of Information Systems Projects in Developing Countries*, Institute for Development Policy and Management, Manchester University, Manchester.
- Heeks, R. (2003), *Most E-Government-for-Development Projects Fail: How Can Risks be Reduced?*, Institute for Development Policy and Management, Manchester University, Manchester.
- Hirschheim, R. and Newman, M. (1991), "Symbolism and information systems development: myth, metaphor and magic", *Information Systems Research*, Vol. 2 No. 1, pp. 29-61.
- Janenova, S. and Kim, P.S. (2016), "Innovating public service delivery in transitional countries: the case of one stop shops in Kazakhstan", *International Journal of Public Administration*, Vol. 39 No. 4, pp. 323-333.
- Johnson, E. and Kolko, B. (2010), "E-government and transparency in authoritarian regimes: comparison of national- and city-level e-government web sites in Central Asia", *Digital Icons: Studies in Russian, Eurasian and Central European New Media*, Vol. 4 No. 3, pp. 5-48.
- Kassen, M. (2016), *E-Government in Kazakhstan: A Case Study of Multidimensional Phenomena*, Routledge, London and New York, NY.
- Knox, C. (2019), "Public sector reform in Central Asia and the Caucasus", *International Journal of Public Administration*, Vol. 42 No. 2, pp. 168-178.
- Knox, C. and Janenova, S. (2019), "Public management reforms: one-stop shops to digital government", in Thompson, W. (Ed.), *Oxford Research Encyclopedia of Politics*, Oxford University Press, Oxford, pp. 1-20, doi: 10.1093/acrefore/9780190228637.013.629.
- Mahmood, Z. (2013), *E-Government Implementation and Practice in Developing Countries*, IGI Global, Information Science Reference, Hershey, PA.
- Meyer, J.W. and Rowan, B. (1977), "Institutionalized organizations: formal structure as myth and ceremony", *American Journal of Sociology*, Vol. 83 No. 2, pp. 340-363.
- OECD (2017), *Towards Effective Open Government Reforms in Kazakhstan*, OECD Governance Review, Paris.
- Open Government Partnership (2018), "Driving democracy forward", available at: www.opengovpartnership.org (accessed 18 November 2018).
- Perri 6 (2004), *E-Governance*, Palgrave Macmillan, Basingstoke.
- Sheryazdanova, G. and Butterfield, J. (2017), "E-government as an anti-corruption strategy in Kazakhstan", *Journal of Information Technology & Politics*, Vol. 14 No. 1, pp. 83-94.
- The United Nations E-Government Survey (2018), "E-government in support of sustainable development", available at: <https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2018> (accessed 3 December 2018).
- Transparency International Corruption Perceptions Index (2017), available at: www.transparency.org/news/feature/corruption_perceptions_index_2017
- Weerakkody, V., El-Haddadeh, R., Sabol, T., Ghoneim, A. and Dzapka, P. (2012), "E-government implementation strategies in developed and transition economies: a comparative study", *International Journal of Information Management*, Vol. 32 No. 1, pp. 66-74.
- World Bank (2015a), "E-government brief", available at: www.worldbank.org/en/topic/ict/brief/e-government (accessed 1 December 2018).

World Bank (2015b), *Concept Note: Introduction to E-Government*, World Bank, Washington, DC.

Zherebtsov, M. (2016), "Assessing the transformative power of e-government in post-soviet regimes: the cases of Russia and Kazakhstan", *International Political Science Association Conference, Poznan, July*, available at: http://paperroom.ipsa.org/papers/paper_58781.pdf (accessed 15 November 2018).

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