European Review, Vol. 28, No. 5, 793–809 © 2020 Academia Europaea
doi:10.1017/S1062798720000241

Cheating the Machine: E-voting Practices in Kyrgyzstan's Local Elections

ARZUU SHERANOVA

The Doctoral School of Political Science, Corvinus University of Budapest, Fovám tér 8, Budapest 1093, Hungary. Email: arzuusher@gmail.com

This paper analyses the e-voting experience of the local elections undertaken by Osh city Council in 2016. The process was introduced to ensure fair and democratic elections in Kyrgyzstan after continuous and repeated violent political uprising. The e-system, based on biometrics registration, biometric identification of voters and automated vote counting, was designed to help to avoid the most common election frauds: vote buying, carousel voting and group/family voting. The case study, mainly based on interviews, illustrates the adaptation and modernization of strategies to resist and cheat within the e-voting system. The analysis outlines three widely practised cheating strategies: procedural violations, such as avoiding cross-checking of manual and automated counting and allowing voting without biometrical identification; transformation of bribery into 'vote auctioning'; and strengthening of kinship-based/regional support and tribal/regional identity under conditions of e-voting.

Introduction

In post-communist Kyrgyzstan, elections and referendums were treated as a means of 'procedure-based legitimacy' (von Soest and Grauvogel 2015) and a strategy to consolidate presidential power (Murzakulova and Schoeberlein 2009). The clan-based rule of two presidents, Akaev Askar (1991–2005) and Bakiev Kurmanbek (2005–2010), led to public demonstrations and political coup-d'états in March 2005 and April 2010. These further escalated into inter-ethnic conflict in June 2010 in Osh and Jalalabad, complicating a peaceful political transition. Political instability and conflict potential in the country accelerated the necessity for introducing e-voting in post-conflict Kyrgyzstan. As was noted by the Carter Center, e-voting has a 'particular advantage in conflict and post-conflict scenarios where a prolonged period of counting can heighten tensions and reduce confidence in the final results' (The Carter Center 2005, 1).

Since 2013, Kyrgyzstan, with international financial support, shifted to e-governance and an e-voting system. The digitization of Kyrgyzstan's voting system aimed at

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

more transparent and fair elections is one of the projects initiated by the Kyrgyz government. The government claimed e-voting would help to build more transparent and democratic elections, strengthen trust towards the government, ensure political stability and prevent conflicts. In addition, in polling stations, e-voting seemed a solution to widely-practised frauds, such as vote buying, 'carousel voting' or multiple votes by one person and group/family voting – a common phenomenon in the region. In addition, e-voting was designed to prevent a number of commonly practised administrative violations, such as voters' list misuse, abuse of administrative power and mass uplift of ballot packs. IT innovations introduced to the election system of Kyrgyzstan included (i) electronic voters' lists based on biometrics registration; (ii) voting based on biometric identification or scanning; and (iii) usage of automated vote counting (AVC).

Existing literature on elections and voting practices in Kyrgyzstan does not address e-voting, because application of new technologies to the electoral process is a relatively new phenomenon and an under-studied subject. This article refers to similar studies in other developing countries where it draws comparisons with challenges in e-voting implementation. As discussed in the following section, the literature mainly indicates technical issues, such as security, verifiability, authenticity, privacy, trust and ability to use technology. Unlike non-technical issues, such as vote buying, procedural violations such as avoiding a cross-check of manual and automated counting and allowing voting without biometrical identification, the issues of tribalism/regionalism and other frauds remain an understudied subject within e-voting, although they are well-studied in paper-based voting. The Kyrgyz example contributes to the under-studied non-technical challenges within e-voting and suggests entrepreneurial ways of cheating the e-voting system. This case demonstrates usage of common frauds seen in previous elections, such as violation of vote counting procedures in polling stations, vote buying, regionalism/tribalism, and an under-reformed voting framework – the e-voting model. The article argues that e-voting, on the contrary had reinforced existing issues related to bribery, regionalism/tribalism and administrative pressure, as cheating became more entrepreneurial and needed more financial resources.

This study represents both an empirical puzzle and points out gaps in the literature addressing e-voting. In addition, this study of e-voting in Kyrgyzstan demonstrates different strategies used by competing political forces and voters to cheat within the e-voting system. The article discusses three key strategies commonly observed in all polling stations on Election Day in Osh: procedural violations such as avoiding cross-checking of manual and automated counting and allowing voting without biometrical identification (strategy one), transformation of bribery into 'vote auctioning' (strategy two) and strengthening of kinship-based/regional support and tribal/regional identity (strategy three). Elections are still considered by society as bargaining and negotiation tools between voters and candidates to achieve material gains along regional/tribal lines, but not necessarily a process of expressing a political will. This article is organized into four sections: (1) the introduction; (2) a theoretical part and methods; (3) a discussion of three strategies; and, finally, (4) a conclusion.

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

The Challenges of E-voting

Recent studies have claimed that e-voting or electronic voting is the most important component of e-democracy and a way to ensure transparent and fair elections (Rodrigues-Filho *et al.* 2006; Eraky 2017). There are many definitions of e-voting. This article defines e-voting in the following way:

> Electronic voting (also known as e-voting) is a term encompassing several different types of voting, embracing both electronic means of casting a vote and electronic means of counting votes. It can include punched cards, optical scan voting systems and specialized voting kiosks (including self-contained direct-recording electronic voting systems, or DRE). It can also involve transmission of ballots and votes via telephones, private computer networks, or the Internet. (Saini *et al.* 2017, 75)

Studies on e-voting differentiate between two types of e-voting depending on the form of implementation (Pupkov *et al.* 2016). The first is internet-based e-voting, a distant way of voting with use of special applications on mobile phones or personal computers, or via terminals installed in public spaces. Second is e-voting conducted within a polling station with the use of specialized technical equipment in a controlled environment (Pupkov *et al.* 2016). In the Kyrgyz case, we speak of the second type of e-voting. E-voting in Kyrgyzstan is undertaken by using specialized technical equipment, automated systems comprising a set of interconnected software and technical solutions such as scanners used for collection, processing, storage and transmission of data. According to the Carter Center's (2005) classification on e-voting realization, e-voting can be done through optical scanning of ballots and direct recording of votes – a touch-screen system used to select a candidate on the screen. In Kyrgyzstan, e-voting is implemented through optical scanning of ballots.

A review of the literature on the topic suggests two main directions: those studies that support e-voting and those that indicate challenges within e-voting. The Estonian experience of e-voting since 2005 is a sound example of successful application of e-voting (Unt *et al.* 2017). According to Tsahkna (2013), it led to an increase of voter turnout. The Estonian government introduced e-voting to ease the voting process and increase voting turnout (Tsahkna 2013). In Estonia, voting is conducted in two ways: voting at the polling station and e-voting (voting using a special application) (Tsahkna 2013). According to the author's calculations, e-voting in Estonia on average saved time spent voting by up to 38 minutes (Tsahkna 2013). Estonians tend to use e-voting because it is low-cost, less time-consuming, flexible and accessible. Among the other advantages of e-voting, other authors mention the ability of voters living in adjacent areas to vote without attending polling stations (Sadykova *et al.* 2018, 257). In addition, e-voting is believed to be convenient and more accessible for voters and cost-effective – less time and less paper is used (Sadykova *et al.* 2018).

Most of the studies on the challenges of e-voting implementation single out technical issues such as issue of trust, security, verifiability, authenticity, privacy and accuracy of election outcomes (Barrat *et al.* 2012; Gibson *et al.* 2016). For instance, a study by Choi and Kim reports that in adoption of e-voting, security, confidentiality

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

and accuracy have 'a significant impact on e-voting participation intention' (Choi and Kim 2012, 446), whereas accuracy is suggested to be 'a core function of the e-voting system' (Choi and Kim 2012, 446). Similarly, Cetinkaya and Cetinkaya (2007) mention issues of security, privacy and trust in e-voting. According to them, the challenges are to ensure private, secure e-voting and increase trust in the system (Cetinkaya and Cetinkaya 2007). Hamed and Sedky (2016) question the reliability of e-voting, raising issues of trust when considering election outcomes.

In addition, there are numerous studies that suggest important conditions for the success of e-voting. For example, Eraky suggests seven independent variables as key cornerstones in successful implementation of e-voting in Egypt: 'leadership, government willingness, legal framework, technical quality, awareness, citizen's trust in government and IT literacy' (Eraky 2017, 48). The author stresses trusted leadership and trust in general as 'the most important factor' in implementation of e-voting (Eraky 2017, 66). Research by Alomari notes the following factors as being important in influencing adoption of e-voting in Jordan: 'trust in the internet, trust in government, attitudes, beliefs, internet and computer skill confidence, website design, relative advantage, compatibility, complexity, perceived usefulness (PU) and perceived ease of use (PEoU)' (Alomari 2016, 543). A study by Bhattacharya *et al*. (2012) suggests that lack of technical infrastructure is an important challenge towards successful realization of e-governance, including e-voting. In addition, a study by Nu'man (2012) similarly demonstrates that for successful implementation of e-voting in Jordan electoral trust in voting technology is needed. Other authors note the exceptional importance of leadership commitment in successful implementation of the e-governance, including e-voting (Esteves and Joseph 2008; Heeks and Stanforth 2007).

Contrary to the studies discussed above, in relation to voter turnout increase, an experimental study by van den Besselaar *et al.* (2003) notes that e-voting does not increase voter turnout if it is not well designed, and the authors argue that legal and institutional aspects of e-voting need to be more decisive than technical aspects. Rodrigues Filho (2010) also argues that, in Brazil, e-voting did not increase public participation despite e-voting being extensively and publicly supported by the government as trustworthy, yet, on the ground, issues of corruption and underrepresentation remained.

A number of theories have been utilized in the study of e-voting adoption, such as the theory of reasoned action, Technology Acceptance Model (TAM), Diffusion of Innovation Theory (DOI), technology-organization-environment (TOE) and web-trust model. Fishbein and Ajzen's (1975) theory of reasoned action studied psychological aspects of human motivation and distinguished at its core (a) attitude towards the object and (b) attitude toward the behaviour. In the case of e-voting, it explained voters' attitudes towards e-voting, and voters' intentions behind supporting/non-supporting e-voting. A Technology Acceptance Model developed by Fred Davis is merely a revised version of Fishbein and Ajzen's theory. TAM explains the application of technology by users as the interaction of three factors: (1) perceived ease of use; (2) perceived usefulness; and (3) attitude toward using the system

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

(Davis 1993). As in Fishbein and Ajzen, in the TAM, acceptance of the technology was dependent on two factors: perceived ease of use (effortless), and perceived usefulness of the technology suggested (increase of job performance). However, the Diffusion of Innovation Theory stressed innovation as an advantage when compared with previous systems or technology (Rogers 1995). The technology-organization-environment framework developed by Tornatzky *et al.* (1990) identified factors that motivate the application of technology, such as the technological context (technology), the organizational context (characteristics, such as structure, resources, relationships), and the environmental context (environment and citizens' awareness). Finally, the web-trust model suggested adoption of the technology in the case of the existence of trust in technology and e-systems and the government that arranges it (Carter and Belanger 2005).

This study contributes to existing studies on e-voting and theories on e-voting adoption, namely to a technology–organization–environment model, by suggesting that non-technological context is even more important for successful implementation of e-voting than contexts of a technological and technical character, such as issues of trust, security, verifiability, authenticity, privacy and accuracy of election outcomes, ability to use technologies, etc. which are over-present in most of the reviewed literature above.

Data and Methods

After a series of political crises and inter-ethnic conflict, Kyrgyzstan became the first country in the Central Asia (CA) region to adopt an e-voting model, therefore lessons drawn from the Kyrgyz e-voting experience are critically useful to other CA countries that share the same historical and cultural context and might consider e-voting in the future. The election of the Osh city Council was held as part of a series of municipal or local elections in Kyrgyzstan in 2016. These rounds of municipal elections were the second since the e-voting system had been rolled out following the parliamentary election in October 2015. Unlike other municipal elections, the Osh city Council election drew greater attention and was more politically important because the majority of seats gained in the City Council would elect the Mayor of Osh. Osh, and southern Kyrgyzstan as a region, has historically been competing for power with northern Kyrgyzstan. In the aftermath of the 2010 Tulip revolution, Osh and the south of the country were reluctant to accept a new claiming power because of political tensions related to Bakiev's ouster (a southerner). Therefore, the appointment of a loyal Mayor in Osh would be an asset to, at that time, a weak interim government. The Osh city Council election can be considered as an election with significant political importance at a national level: political parties competed full scale, as is the norm during national elections. A study of e-voting in Osh will help us to examine closely the combination of various strategies used to challenge e-voting that also took place during the parliamentary elections in 2015.

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

The data for the study were collected during five in-depth interviews in Osh city in March and May 2016. The first interview was conducted with the head of regional representation of a non-governmental organization in Osh city called the 'Coalition for Democracy and Civil Society' (the 'Coalition'). The second interview was conducted with a representative of the Osh Information Resource Center of 'Taza Shailoo' Association. The third was conducted with an Election Committee (EC) member in a polling station in Osh. Two more interviews were conducted with independent observers on Election Day. Interviews in a semi-structured format were done in Kyrgyz and Russian languages. Personal observations of the day of the election of the local Council in Osh are also reflected and described in the article. The Kyrgyz laws on electoral procedure were thoroughly studied and analysed. Secondary data included similar studies taken from other developing countries, media sources and reports.

Cheating Strategies in Kyrgyzstan

In 2010, Kyrgyzstan launched its reforms and adopted the National Strategy on Sustainable Development that introduced a state initiative to adopt biometric passports and e-voting (The National Strategy 2013). The government adopted a working plan of actions to be implemented in 1½ years, and highlighted voting lists based on biometric data as a key step in building e-voting. In the old voting system, a paper-based voting list was at risk of manipulation and fraud by ruling parties. The United Nations Development Program's (UNDP) project in Kyrgyzstan, focusing on elections support, financed the Kyrgyz government's activities in 2011–2012, while, in 2017, the EU programme 'Strengthening of democracy through election system reform' allocated €2.5 million to support the ongoing electoral reform.

According to the amended electoral legislation[1] of Kyrgyzstan, voter identification was done with the help of biometric data. Following identification in the biometric system, voters register in the printed voting list and are issued with a paper ballot (The Constitutional Law 2011). In case there are discrepancies in automated and manual vote counting, the final results are defined by repeated manual counting (The Constitutional Law 2011). The introduction of e-voting signalled Kyrgyzstan's will to address election frauds – vote buying, multiple voting or so-called 'carousel voting', and group/family voting.

However, e-voting in Osh city demonstrated a strengthening of existing frauds. Fraud strategies under e-voting conditions became entrepreneurial and were adapted into the new system. In total, 13 political parties ran for the Osh City council elections. Despite there being many parties, only four were in the running: two ruling parties (Social Democratic Party of Kyrgyzstan and Bir-Bol party) and two parties in opposition (Ata-Meken party and Respublika-Ata-Jurt party). While opposition

1. The Constitutional Law on Elections of the President of the Kyrgyz Republic and Deputies of the Kyrgyz Parliament (2011).

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

parties, it was revealed in the research, tend to use second and third strategies mentioned below, parties in power experienced all strategies. Procedural violations were favoured by parties in power. The following demonstrates three key common strategies pursued by all political parties observed in polling stations on Election Day: procedural violations, such as avoiding manual counting and automated counting cross-checking, allowing voting without biometrical identification (strategy one); transformation of bribery into 'vote auctioning' (strategy two); and strengthening of kin community-based/regional support (strategy three). Before discussing the last strategy, a brief description of clan or kinship-based networks is given.

Strategy One: Procedural Violations at Polling Stations

According to electoral procedures under the e-voting system, vote counting of results in a polling station are declared as final after conducting a controlled manual vote count, witnessed by representatives of both election observers and political parties. This cross-check is important to ensure the accuracy of vote counting performed by the machine – the AVC or automated ballot box. However, this rule was breached in a number of polling stations in Osh city, as evidenced during a series of expert interviews. According to the head of regional representation of the 'Coalition', in the city some polling stations observed by the NGO Election Committee members failed to conduct a control manual vote count despite this being a breach of counting procedure (Interview A, 2016). Ten out of 73 observed polling stations were not willing to cross-check voting results provided by the machine.[2] The NGO representative believed this to be a sign of Election Committee members' impartiality. To quote from the head of the 'Coalition':

> To our surprise, Election Committee members were not reluctant to cross-check vote results by performing manual vote counting, despite it is indicated in the Law as a must do step. There were complaints from election observers, including our NGO to report these cases afterwards. In general, this speaks of preservation of administrative abuse by Election Committee members on the level of polling stations. This speaks of impartiality of Election Committee members. (Interview A, 2016)

The independent election observers also noted that avoiding manual counting was done to influence election outcomes. According to one of the independent observers who agreed to give interviews on conditions of anonymity, Election Committee members could have access to the AVC system:

> There is distrust towards the Election Committee members among us. All people here [observers in the polling station] were chatting in the morning that members of the Election Committee could have access to the system and could influence voting outcomes. But, initially I did not share this idea, however afterwards, I realized

2. I have used in this article some numbers which I wrote in an earlier brief report called 'E-voting in Local Elections in Kyrgyzstan Fails to Put and End to Fraud' to Muftah available at: https://muftah.org/e-voting-local-elections-kyrgyzstan-fails-put-end-fraud/#.XmkmxqhKg2w (posted 2 August 2016).

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

> that it is true because Election Committee members did not crosscheck AVC voting results and it was very evident that Election Committee members were not impartial, they were pro-government. (Interview D, 2016)

Similar practices of avoiding manual counting were mentioned during the 2015 parliamentary election in Kyrgyzstan. For instance, Devitskiy (2017) noted imitation of manual counting in most polling stations. He continued that in most polling stations election observers left after finding out the voting results were counted by the AVC, or they were not interested in staying for the manual counting of results, whereas the EC members were either reluctant or had a weak understanding of voting legislation and skipped manual voting either because of the new IT-involvement in the voting process or on purpose. Similarly, the OSCE Election Observation Mission to the Parliamentary election in 2015 report, states that protocols of the results 'did not reconcile or match the results produced by the ballot scanners … did not manually count the votes bypassing legal safeguard for enhancing public trust to the results' (OSCE/ODIHR 2016, 3). The report continues that: '[i]n almost one-half of counts observed, the results of the manual count did not match those produced by the ballot scanner' (OSCE/ODIHR 2016, 24).

In addition, as the NGO representative noted, in some polling stations observed in Osh, voters were given ballots for voting even if they did not go through enrolment and identification in the biometrics system. As the NGO representative remembered: 'This was justified by saying that the system was overloaded and therefore could not scan voter's identities, while they [the Committee members] were guaranteeing that they knew the person [a voter] personally, assuring the rest that he/she did not vote twice' (Interview A, 2016). In other words, the Committee members were taking oral responsibility for allowing voters to vote without identification. Interviews with an Election Committee member revealed that technical problems with the biometrics system allowed committee members to proceed with the voting without scanning voters' biometric data. 'We had to let them vote, because of technical problems within the system. The voting could not be disrupted because of it. In addition, there were aggressive voters, who would blame us later' (Interview C), said the EC member. The Law on Local Councils elections (2011) and the Constitutional Law on Election of the President of the Kyrgyz Republic and Deputies of the Kyrgyz Parliament (2011) highlight voting merely based on biometric data identification or scanning. To allow voting without biometric data identification or scanning is a breach of the voting procedure and the electoral legislation in general.

Another violation by the EC members that related to biometric identification, and reported by the NGO, was the practice of not cross-checking the number/quantity of printed bills or papers verifying accomplishment of biometric identification against the number of voters registered in the hard-copy of the voters' list. This gap could also be considered as a new approach to cheat the machine, according to the 'Coalition', because EC members could invite loyal 'strangers' to the polling stations or people from other regions to vote in favour of a specific candidate, in particular pro-government candidates. In response, an anonymous interviewed Election

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

Committee member in Osh claimed that because of technical problems with biometrics system EC members faced pressure from voters and were forced to let voters vote without being formally identified in the e-system. EC members stressed that they were responsible for non-violent elections and in order to manage voters' expectations there was no other alternative option.

Strategy Two: Transformation of Bribery into 'Vote Auctioning'

Political parties thought of creative ways to reach out to communities and to garner greater support, so e-voting theoretically became a challenge for carousel voting, group/family voting and mass uplift of ballots. The first thing each political party did, according to an interview with 'The Coalition', was to divide neighbourhoods that belong to a polling station between party candidates and their so-called 'agitators', or hired people, in order to campaign and promote parties' visibility before the election. Political party candidates divided polling stations based on regional affiliations and the presence of loyal people within the respective regions. Osh city was divided into 73 polling stations. Candidates had divided the polling stations between themselves and contracted agitators. Appointed agitators were rewarded with a negotiated amount of money for their work; and received a fixed amount of money for bribing voters prior to the election and during the Election Day. The interviewee stated that, 'Agitators were assigned by political parties for a specific rayon [city district]. The agitators were usually community leaders, activists, friends or relatives of political party representatives depending on circumstances' (Interview A, 2016). As an ex-member of Central Election Committee of the Kyrgyz Republic mentioned, 'elections become a kind of business in Kyrgyzstan' (Vesti.kg 2016a).

Prominent NGOs specialized in election observation in Kyrgyzstan, 'Taza Shailoo' Association and 'Coalition for Democracy and Civil Society', stated that bribery was at a peak and all-time high during the Election Day. 'Taza Shailoo' noted there was auctioning of votes on Election Day in a discrete and hidden way. In addition, the head of 'The Coalition' pointed out they had observed the open auction of votes in polling stations. He further explained how, on Election Day a bribing fee ranged from 500 Kyrgyz Soms (€6.32)[3] up to 2000 Kyrgyz Soms (€25.30) depending on time and place. He further explained during the interview, 'In polling stations close to the end of voting day, the bribing fee would be much higher rather than a day or a week before the Election Day' (Interview A, 2016). Other sources informed that in Osh one vote cost up to 3000 Kyrgyz Soms (€37.90) (Vesti.kg 2016b). According to the head of 'The Coalition', political parties tried to spread money only through reliable or loyal channels (Interview A, 2016). He believed that bribery with respect to votes was especially popular in Uzbek communities who usually stay more loyal than Kyrgyz communities. According to him, for Uzbeks this was a 'good deal,' especially because the average-size Uzbek family consists of 6–7 adults, so the bribing fee in sum was, on average, up to 6000–7000 Kyrgyz

3. EUR–KGS exchange rate for 2016, according to the National Bank of the Kyrgyz Republic.

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

Soms per family (€88.50). Accordingly, bribing was a 'good deal' for all low- and medium-income families in Osh where an average salary is 6000–7000 Kyrgyz Soms. He further narrated a true story where he described a man contracted to be an agitator in Amir-Timur community, Osh.

> The man received 200,000 Kyrgyz Soms from X political party prior to the election and was tasked to spread and get back at least 16,000 votes from his district (Amir-Timur). The agitator would distribute money among his reliable network [relatives, friends, *mahalla* or street leaders] in order to secure needed votes from his district. It is believed this kind of deal between agitators and various political party representatives were common in other districts. In summary, we speak about significant sums of money being involved even at local election level. (Interview A, 2016)

In Kyrgyz communities, bribery merely worked on a '50:50 principle'. Under this principle, voters were given half the remuneration before 'the deal', and the half the amount was given after voting. According to interviews conducted with independent observers, during local elections, voters that were bribed tried to demonstrate marked ballots in the polling station to an Election Committee member who was part of the deal, before throwing the vote into the electronic urn (Interviews D, E, 2016). More creative voters reported on their voting loyalty by demonstrating photos they had taken of their marked ballots in the voting cabin, they did so to EC members after casting their vote. The observer explained during the interview that: 'I saw how voters after voting for a party, were approaching agitators or Election Committee members outside the polling station presumably to get the rest of their money' (Interview E, 2016). Similarly, a lack of secrecy of votes was reported by the OSCE as one of voting violations during the parliamentary election in 2015: 'In 13 per cent of polling stations observed, not all voters marked their ballots in secrecy. In 27 per cent of polling stations observed, voters' choice could be seen as they took their ballot from the voting booth to the ballot box. In 11 per cent of observations, the mark on the ballot could be seen through the reverse side, due to the fact that the paper was relatively thin and ballots were marked with permanent markers' (OSCE/ODIHR 2016, 23).

There was mass bribery as Osh city elections led to a transformation of bribery into 'vote auctioning'. As was described by experts during interviews and by independent observers, several competing parties bribed voters simultaneously. Accordingly, each political party suggested a bigger reward for votes in order to be more attractive and to secure more votes. As was noted by both anonymous observers, there were open discussions among some of their family members about giving votes to the political party that had rewarded them the most. They were likely to choose the political party not based on the party's competencies or political programmes but based on the amount of reward offered.

> My brother-in-law is a taxi driver, he said to my sister that they would vote for the party which would give the biggest reward. While other relatives said that they would take money from all parties that offer money, and vote for the one they really liked. (Interview E, 2016)

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

Another interesting personal observation worth mentioning is simultaneous cheating on the side of bribed voters against the political candidates. Also confirmed by both independent observers and the Coalition NGO representative, there were numerous truth-based stories when families would get as much money as they could from various political parties, pretend they would vote for them, and end up voting for political parties they truly supported or believed in. 'There was even a saying among people that they had substantially improved their family budgets and gained resources during campaigns,' explained the NGO representative (Interview A, 2016). This tells us that voters became entrepreneurial too: they made money, pretended to be loyal to political parties distributing money, and voted for the party they wanted to support. Thus, elections in Osh seemed to turn into a business deal with bribery transforming them into 'vote auctions'. Interestingly, the risk of cheating led to the third strategy – strengthening of existing native clan or kinship-based loyalties and regional networks in order to ensure the loyalty of voters.

Strategy Three: Strengthening Support and Identity

Modernism in Kyrgyzstan did not diminish traditional kinship-based or clan-based legacies; rather, they further developed under political party dimensions (Torogeldieva 2010). On the one hand, clan identity is viewed as a stability provider within a democracy or democracy facilitator (Reeves *et al*. 2014). On the other hand, clan identity is viewed as harmful to democracy (Collins 2003). Traditional social structures or networks called clans (*uruu* in Kyrgyz) are an inalienable part of the Kyrgyz culture and have a considerable impact on contemporary Kyrgyz politics. According to Collins (2004, 226), 'clans are the primary source of political and economic power'. The phenomenon of clans, as determined by the author, is an 'informal identity network based on kinship ties' (Collins 2004, 171). On the other hand, Radnitz (2005) and Gullette (2007) argue that contemporary Kyrgyz society has only 'genealogical imagination' of clans.

In Kyrgyzstan, political parties lack substantial clear ideology or programmes but do have a narrow electorate around a certain region or clan (Temirkoulov 2004). It was believed that the single- member constituency mandate reinforced clan and regionalism identities/loyalties by dividing constituencies by clans, administrative units and oblasts. The current system of elections to the Kyrgyz Parliament is a closed-list PR system introduced to fight regionalism/tribalism after the 2010 Constitutional Referendum. Despite the system being designed to represent diverse groups within a society and promote an inclusive legislation branch, the system remains weak and contributes to the maintenance of kinship ties or clan-based practices. The practice had shown that either seats are sold among party members, or seats are shared per clan/network or region principles. For instance, Sjöberg's (2011) study on elections suggests that close to 75% of respondents mentioned relatives and kinship ties as one of two 'most important groups of people in their campaigning' (Sjöberg 2011, 33). According to some respondents, they would refer to their own clan for support because they would provide 'free labour' for campaigning in favour of kinship

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

candidates (Sjöberg 2011, 133). The study suggests the considerable role of *aksakals* (elderly people) in campaigning activities, one out of five candidates admitted that *aksakals* were central in their campaigns: in mobilizing people, in talking to people, in nominating candidates and decision-making, in arranging campaigns, and, last but not least, coordinating vote buying (Sjöberg 2011, 133). As per Torogeldieva (2010), parties in Kyrgyzstan during their registration had no political ideology but were consolidated by regionalism or tribalism. Similarly, Kartawich (2005, 7) notes in her report that political parties in Kyrgyzstan are 'small' and 'restricted to a specific geographical area'. Finally, the extremely high number of political parties in Kyrgyzstan, which was around 200 in 2015 according to official data (Azattyk.org 2015), can be both evidence and example of the problem of political parties representing not political values, as in Western countries, but instead representing various clan or regional interests within Kyrgyzstan.

The example of the Osh city election, as described below, demonstrates that tribal/regional loyalties and identities become even more significant in electoral mobilization, campaigning, and political preferences under the e-voting system. Strengthened campaigning of political party representatives by kinship or regional principles, as well as instrumental accentuating and manipulation of voters' tribal or regional identities under the e-voting model, further contributes to undermining of national or civic identity.

Political parties during the local election in Osh, being aware of the risk of cheating by voters, manipulated kinship networks and accentuated tribal loyalties. As was also noticeable during the 2015 Parliamentary election, political parties distributed their own candidates for campaigning depending on place of birth and social influence in order to manipulate 'sacred' kinship and regional values and networks. In Osh, political party representatives relied on clan or family networks to ensure efficient and rational distribution of bribes. They tried to ensure that voters who had been bribed would vote for them despite receiving rewards from other political parties. Political parties tried to get support from native extended clan and family networks to get a loyalty from voters who had been bribed. Clan members being considered as loyal, were bribed and assigned to agitate. As observations of Osh city Council election have demonstrated, most candidates preferred distributing money for extended family or clan insiders, or *mahalla* network, rather than distributing money to people out of clan or extended family networks.

> The agitators sought support from reliable network members, such as *mahalla*s or extended family to ensure loyalty of voting outcomes, because agitators were responsible for getting the necessary amount of votes in exchange for money. They had to report on money by the amount of votes in the assigned rayon. (Interview A, 2016)

Finally, the abuse of administrative power during the municipal elections in Osh in 2016 deserves our attention. Polling stations, as a rule, are formed in a state space, such as public schools, kindergartens, universities or other state buildings, where key administrative staff as part of their responsibility per se become election committee members. Accordingly, Election Committee members are vulnerable to administrative power abuse from the ruling party, or they voluntarily tend to support the

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

political party in power to secure their own position. 'The Coalition' noted that in some polling stations election observers were not allowed by Election Committee members to participate in the vote counting process, which is a serious breach of electoral legislation. On the other hand, a 'Taza Shailoo' Association representative was optimistic that because of the biometric system, administration pressure was very minimal in comparison with previous elections (Interview B, 2016). She believed that the e-system could minimize misuse of the voters list, which was a very common practice before e-voting. She further clarified that, due to e-systems, a voter could fully realize their own voting right only if he/she was entered into the biometrics system. In addition, she believed that e-voting guaranteed, this time, implementation of the 'one vote – one ballot' principle and helped to avoid carousel voting.

Conclusion

This study aimed to analyse the e-voting experience of local elections in Osh, Kyrgyzstan, in 2016. It focused on the under-studied non-technical challenges of e-voting implementation. This case demonstrated adaptation of widespread frauds from the previous voting system, such as voting procedures violations, vote buying, regionalism/tribalism, within a new e-voting system. The article argues that the e-voting experience in Kyrgyzstan, instead of guaranteeing transparent and fair election, on the contrary helped to maintain, adapt and reinforce existing ways of election frauds. Bribery, regionalism/tribalism and administrative pressure, as the Kyrgyz case shows, became even more explicit on the surface, where previously they were under the surface and latent. Because cheating under e-voting became more difficult, it required actors to modernize their approaches, be more entrepreneurial and it required bigger financial investment. Both political party representatives and voters, as revealed in the paper, were entrepreneurial in adapting old ways of cheating within a new e-system. Similarly, administrative abuse remained unchanged, it was re-shaped into a form of violation of e-voting procedures, such as avoiding manual counting and automated counting cross-checking, and allowing voting without biometrical identification. Elections within Kyrgyz society are still considered as bargaining and negotiation between voters and candidates along material gains and regional/tribal lines, but not a process of expressing political will. The Kyrgyz e-voting experience suggests that e-voting was merely a top-down initiative that the society was not ready to adopt, while modified/adapted fraud strategies can be considered as a response to the externally influenced western model.

In contrast to the prevailing literature on technical challenges in e-voting implementation, this study suggests that non-technical aspects should not be underevaluated when designing e-voting. Reflecting on existing theories on the use of technologies, this article contributed to the theory of the technology–organization–environment framework that, in comparison with other theories, suggests the importance of the non-technical context. The case supported the necessity of an integrated approach in introducing e-voting (as suggested by the technology–

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

organization–environment theory). The experience from Kyrgyzstan stresses the particular importance of the local context where e-voting is introduced. As demonstrated, both political parties and voters can pursue their ways of cheating even under an e-voting system. Accordingly, the e-voting model is far from being a guarantee of transparent and fair elections in contexts where election frauds were common before. As an externally imported model, e-voting can unintentionally result in negative and harmful consequences. A local context, namely the readiness and willingness of the society to accept e-voting, should be thoroughly studied prior to initiating e-voting. The study casts light for further research, such as a study of the unintended consequences of e-voting, and a critical study of e-voting as a top-down or externally influenced model that needs to be re-framed or localized.

Acknowledgement

The present publication is the outcome of the project 'From Talent to Young Researcher project aimed at activities supporting the research career model in higher education', identifier EFOP-3.6.3-VEKOP-16-2017-00007, co-supported by the European Union, Hungary and the European Social Fund.

References

Alomari M (2016) E-voting adoption in a developing country. *Transforming Government: People, Process and Policy* **10**(4), 526–547.

Azattyk.org (2015) Sayasiy partiyalar: onumu jana oksugu. [Political parties: pros and cons]. 17 May. Available at https://www.azattyk.org/a/kyrgyzstan_blog_politics/27021014.html (accessed 20 February 2019).

Barrat J, Goldsmith B and Turner J (2012) *International Experience with E-Voting*. Norwegian E-Vote Project. *Report*. Washington: IFES. Available at https://www.parliament.uk/documents/speaker/digital-democracy/IFESIVreport.pdf (accessed 20 February 2019).

Bhattacharya D, Gulla U and Gupta M (2012) E-service quality model for Indian government portals: citizens' perspective. *Journal of Enterprise Information Management* **25**(3), 246–271.

Carter L and Belanger F (2005) The utilization of e-government services: citizen, trust, innovation and acceptance factors. *Information Systems Journal* **15**(1), 5–25.

Cetinkaya O and Cetinkaya D (2007) Verification and validation issues in electronic voting. *The Electronic Journal of e-Government* **5**(2), 117–126.

Choi S and Kim B (2012) Voter intention to use e-voting technologies: security, technology acceptance, election type, and political ideology. *Journal of Information Technology and Politics* **9**(4), 433–452.

Collins K (2003) The political role of clans in Central Asia. *Comparative Politics* **35**(2), 171–190.

Collins K (2004) The logic of clan politics: evidence from the Central Asian trajectories. *World Politics* **56**(2), 224–261.

Davis FD (1993) Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly* **13**(3), 319–340.

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

Devitskiy E (2017) Osobennosti organizacii i provedeniya vyborov i referenduma v Kyrgyzskoi Respublike [Features of organization and holding elections and referendums in Kyrgyz republic]. *Pravo i Vybory* **1**, 23–30.

Eraky A (2017) E-voting implementation in Egypt. *Journal of Contemporary Eastern Asia* **16**(1), 48–68.

Esteves J and Joseph R (2008) A comprehensive framework for the assessment of eGovernment project. *Government Information Quarterly* **25**(1), 118–132.

Fishbein M and Ajzen I (1975) *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*, Reading, MA: Addison-Wesley.

Gibson J, Krimmer R, Teague V and Pomares J (2016) A review of e-voting: the past, present and future. *Annals of Telecommunications* **71**(7-8), 279–286.

Gullette D (2007) Theories on Central Asian factionalism: the debate in political science and its wider implications. *Central Asian Survey* **26**(3), 373–387.

Hamed E and Sedky M (2016) A high secured, cost effectively e-voting system. *International Journal of Information Security and Cybercrime* **5**(1), 11–31.

Heeks R and Stanforth C (2007) Understanding e-government project trajectories from an actor-network perspective. *European Journal of Information Systems* **16**(2), 165–177.

Kartawich L (2005) Kyrgyzstan: Parliamentary Elections. Report. Available at https://www.jus.uio.no/smr/english/about/programmes/nordem/publications/2005/0905.pdf (accessed 1 November 2019).

Konstitutsionnyi Zakon O vyborah Prezidenta Kyrgyzskoi Respubliki i deputatov Zhogorku Kenesha Kyrgyzskoi Respubliki [The Constitutional Law on Elections of the President of the Kyrgyz Republic and Deputies of the Kyrgyz Parliament] (2011). Available at https://shailoo.gov.kg/ru/konstitucionnye-zakony-kr/konstitucionnye-zakony-kr/O_vyborah_Pr-1913/ (accessed 1 November 2019).

Murzakulova A and Schoeberlein J (2009) The invention of legitimacy: struggles in Kyrgyzstan to craft an effective nation-state ideology. *Europe*⊠*Asia Studies* **61** (7), 1229–1248.

Nu'man A (2012) A framework for adopting e-voting in Jordan. *Electronic Journal of e-Government* **10**(2), 133–146.

OSCE/ODIHR Election Observation Mission (2016) Kyrgyz Republic Parliamentary Elections OSCE/ODIHR Election Observation Mission Final Report. Available at https://www.osce.org/odihr/elections/kyrgyzstan/219186?download=true (accessed 1 November 2019).

Pupkov KA, Shanin B and Korotaeva S (2016) Choosing an optimal model of e-voting as an innovative form of election technologies, taking into account the information and telecommunication capabilities at the Syrian Arab Republic. *Vestnik RUDN*, seriya Inzhenernye issledovaniya [*RUDN Ballot*, series on Engineering], 7–15. Available at http://journals.rudn.ru/engineering-researches/article/view/15022/13953 (accessed 20 February 2019).

Radnitz S (2005) Networks, localism and mobilization in Aksy, Kyrgyzstan. *Central Asian Survey* **24**(4), 405–424.

Reeves M, Rasanayagam J and Beyer J (eds) (2014) *Ethnographies of the State in Central Asia: Performing Politics*. Indiana: Indiana University Press, pp. 78–96.

Rodrigues Filho J (2010) E-voting and the creation of trust for socially marginalized citizens in Brazil. *JeDEM* **2**(2), 184–193.

Rodrigues-Filho J, Alexander CJ and Batista LC (2006) E-voting in Brazil – the risks to democracy. In Krimmer R (ed.), *Electronic Voting 2006, GI Lecture Notes in Informatics*. Bonn, Germany: Bregenz, pp. 85–94.

Rogers EM (1995) *Diffusion of Innovations*. New York: Free Press.

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

Sadykova Y, Starynskyi M, Horobetc N and Zhornokui Y (2018) A cost-benefit analysis of preconditions and predicted effects from e-voting implementation in Ukraine. *Trames. Journal of the Humanities and Social Sciences* **22**(3), 257–271. https://doi.org/10.3176/tr.2018.3.03

Saini N, Verma H and Sharma P (2017) An analytical study of e-voting system. *International Journal of Recent Research Aspects* **4**(3), 75–85.

Sjöberg F (2011) Competitive elections in authoritarian states. Weak states, strong elites, and fractional societies in Central Asia and beyond. Dissertation. Uppsala: Edita Västra Aros.

Temirkoulov A (2004) Tribalism, social conflict, and state-building in the Kyrgyz Republic. *ForumBerliner Osteuropa Info* 94–100.

The Carter Center (2005) *Automated Voting and Election Observation.* Summary of Proceedings. Available at https://www.cartercenter.org/documents/nondatabase/automatedsummary.pdf (accessed 20 February 2019).

The National Strategy for Sustainable Development of the Kyrgyz Republic for the period 2013–2017 (2013) Available at http://www.president.kg/files/docs/NSSD-final-version-eng-Feb4.doc (accessed 20 February 2019).

Tornatzky LG, Fleischer M and Chakrabarti AK (1990) *Processes of Technological Innovation*. Lexington, MA: Lexington Books.

Torogeldieva B (2010) On the political behavior of the Kyrgyz people today. *Central Asia and the Caucasus* **11**(2), 7–24.

Tsahkna A (2013) E-voting: lessons from Estonia. *European View* **12**, 59–66.

Unt T, Solvak M and Vassil K (2017) Does internet voting make elections less social? Group voting patterns in Estonian e-voting log files (2013–2015). *PLoS ONE* **12**(5), 1–13. https://doi.org/10.1371/journal.pone.0177864

van den Besselaar P, Oostveen A, De Cindio F and Ferrazzi D (2003) Experiments with e-voting: experiences and lessons. In Cunningham P et al. (eds), *Building the Knowledge Economy – Issues, Applications and Case Studies,* Amsterdam: IOS Press, pp. 719–726.

Vesti.kg (2016a) Partii na proshedshih vyborah v mestnye keneshi otkryto podkupali izbirateley [Parties openly bribed voters during last elections to local keneshs]. 29 March. Available at http://www.vesti.kg/index.php?option=com_k2&view=item&id=39762:partii-na-proshedshih-vyiborah-v-mestnyie-keneshi-otkryito-podkupali-izbirateley&Itemid=83#ixzz44GFiHYhb (accessed 20 February 2019).

Vesti.kg (2016b) V chem prichina passivnosti izbirateleyv Kyrgyzstane? [What is the reason behind passiveness of voters in Kyrgyzstan?] 28 March. Available at http://www.vesti.kg/index.php?option=com_k2&view=item&id=39754:v-chem-prichina-passivnosti-izbirateley-v-kyirgyizstane?&Itemid=80#ixzz44GFT0j27 (accessed 20 February 2019).

von Soest C and Grauvogel J (2015) *How Do Non-Democratic Regimes Claim Legitimacy? Comparative Insights from Post-Soviet Countries.* GIGA Working Paper No. 277, Hamburg: GIGA German Institute of Global and Area Studies. Available at https://www.files.ethz.ch/isn/193127/wp-277-online.pdf (accessed 20 February 2019).

Zakon Kyrgyzskoi Respubliki o vyborah deputatov mestnyh keneshei [The Law on Local Councils elections of the Kyrgyz Republic] (2011) Available at https://shailoo.gov.kg/ru/ZakonodatelstvoMyyzamdar/ZakonyMyyzamdar/O_vyborax_deputatov_mestnyx_keneshei/ (accessed 1 November 2019).

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press

Appendix 1. List of cited interviews conducted in Osh for this analysis

A. The head of regional representation of a non-governmental organization 'Coalition for Democracy and Civil Society', May 2016
B. The head of 'Taza Shailoo' Association representative office, May 2016
C. The member of EC in School, March 2016
D. The independent observer 1, March 2016
E. The independent observer 2, March 2016

About the Author

Arzuu Sheranova is a PhD candidate at the Corvinus University of Budapest and a junior researcher at the Center for Central Asia Research. Her research interests are nationalism, clan politics, security, elections, informal institutions and gender.

https://doi.org/10.1017/S1062798720000241 Published online by Cambridge University Press