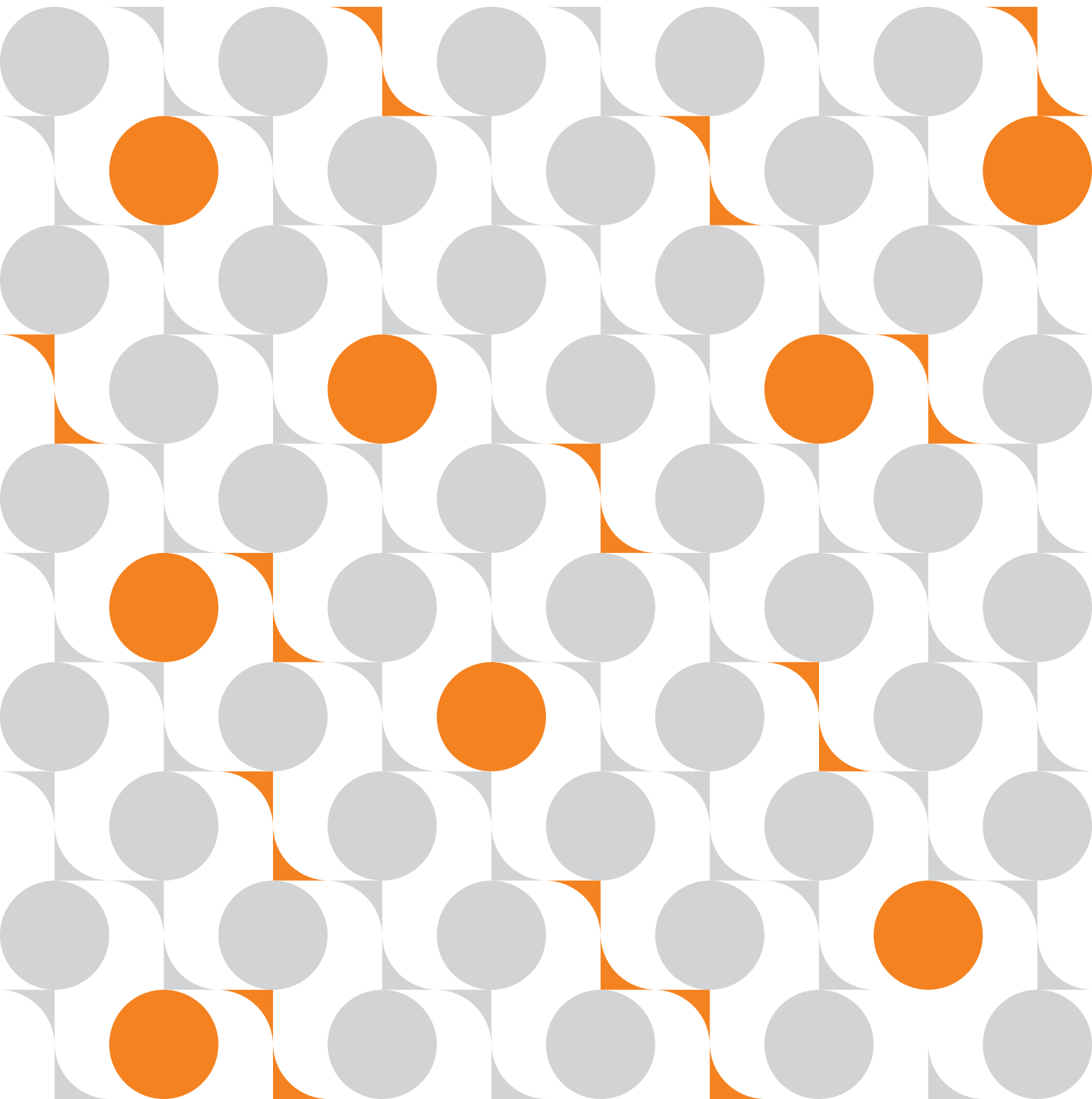


New perspectives in e-government and the prevention of corruption



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Basel Institute on Governance | July 2017

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Abbreviations

FDI	Foreign Direct Investment
HRMIS	Human Resources Management Information System
ICT	Information and Communication Technology
M&A	Mergers and acquisitions
MIS	Management Information System
PFM	Public Financial Management
SWS	Single Window Services
TI CPI	Transparency International Corruption Perception Index
UN	United Nations
UNCAC	United Nations Convention Against Corruption
UNECE	United Nations Economic Commission for Europe
WB	World Bank
WEF PACI	World Economic Forum Partnering Against Corruption Initiative

1. Executive Summary

Does e-government have an impact in reducing corruption? Do e-government solutions sufficiently take private sector perspectives into account to maximize its potential for addressing corruption risks? This paper addresses these and additional questions about the dynamic between governments and the private sector with respect to harnessing e-governance tools for corruption prevention. It is written primarily from a private sector perspective and for private sector actors who are interested in a more comprehensive understanding of the scope and examples of e-government solutions to improve their anti-corruption policies, but concludes with numerous recommendations for the private sector and governments alike.

Defined differently by various actors, e-government generally refers to the use of information and communication technologies (ICT) to transform relations between citizens, businesses and various branches of government. It involves much more than the simple translation of government services onto digital platforms. Rather, e-government has come to refer to participatory forms of interaction between government and non-governmental stakeholders. It is a process that needs a whole-of-government (or inter-agency) strategy, planning, resources and the political will to execute. A similar whole-of-government approach and political will are also the necessary pre-requisites to comprehensive and effective anti-corruption strategies.

Although the literature remains divided on the actual impact of e-governance on corruption prevention, some evidence exists that supports this conclusion. One important study indicates that a country's 1% increase in the UN E-government Index may contribute to a 1.17% decrease in corruption. The premise is that e-government reduces in-person contact between the public sector and individuals, companies, and other non-state actors thereby reducing the ability of individuals to interfere in a regulated and standardised process. This, in turn, diminishes the risks emanating from discretionary decision-making. It also automates a digital trace of any action taken in respect of certain procedures, and alterations will leave a trail. In addition to the potential for anti-corruption prevention, e-government can also result

in speedier transactions, reduced costs for the private and public sectors, greater transparency and therefore greater efficiency. Further research is needed to understand the correlation between e-government and corruption better.

Increased transparency in the public sector is cited as helping to improve trust in government and reduce corruption. Greater transparency is also cited as improving the conditions for businesses to flourish and contributing to the conditions that encourage foreign investment. Information that was previously difficult to access is, with the help of e-government, more readily accessible. Public accountability, a critical tool to prevent corruption can improve, as can the potential for scrutiny of government decisions, and participation in public affairs by non-state actors.

This report presents the results of an anonymous web survey conducted by the Basel Institute on Governance (Basel Institute) in early 2017 to ascertain the extent to which companies are aware of, and use, e-government tools and digital solutions and to solicit their views and experiences regarding the effects of such tools on bribery. Responses were received from a geographically diverse group of 197 individuals, of which 83% were private sector actors from 33 different sectors. The Basel Institute E-Government Survey revealed that in general terms, respondents are motivated to use e-government tools equally for the purposes of reducing the time it takes to complete a transaction as for the goal of reducing bribery risks. However, an examination of the use of e-tools in specific sectors yields more diverse and revealing results. Respondents most frequently used e-government tools in the fields of e-procurement and e-tax, though primarily motivated by the purpose of reducing bureaucracy in those processes. Although respondents used e-government tools in the fields of e-customs and e-sourcing less frequently, these are the two areas where the respondents used e-tools with the highest motivation for reducing corruption. Further research into the initial results revealed in the Basel Institute E-Government Survey could yield targeted advocacy plans for the private sector in specific countries as they develop e-government strategies

and in particular industries. The survey confirmed that companies are motivated by business rationales for using e-government tools, suggesting that businesses (where they have a choice) will use e-government when there is a tangible benefit for so doing. However, the results also indicate that there is room for companies to develop a more nuanced understanding on the particular role that e-government tools can play in reducing corruption independently from the business efficiency rationale and incorporate an analysis and use of such e-tools in their anti-corruption policies more effectively to this end.

E-government can reduce corruption. To strengthen its effectiveness however, and to speed up the delivery of e-government requires greater engagement, commitment and participation from both governments and businesses. These sectors have to act beyond their respective spheres, coordinating and collaborating more effectively. The private sector is now widely recognised as a key driver of economic growth and development, and governments should harness this more effectively when driving their e-government strategies.

The report concludes with a series of recommendations based on the research detailed in this report and from the responses received in the Basel Institute's E-government Survey. The proposed actions are directed at both the public and private sectors, and include areas where greater collaboration would benefit all sides.

Recommendations for the private sector:

- Integrate the requirement to identify e-government tools that may reduce the risk of bribery in corporate anti-corruption compliance policies and use them where appropriate.
- Assess a country's whole-of-government strategy towards e-government tools as part of anti-corruption risk assessments and due diligence on business partners, joint ventures & M&A transactions.
- Assess whether third parties who are engaged in government relations or retained to collect market data are really needed if open government data or an e-government tool is available.
- Review periodically the effectiveness of e-government tools in business processes and in anti-corruption efforts; share such data internally, externally, and across jurisdictions to contribute to the private sector's understanding and awareness of such tools and their usefulness.
- Participate in secondments between the public and private sector to develop capacity in the public sector and to foster mutual understanding of the issues and increase knowledge transfer when it comes to e-government.
- Actively engage in public-private partnerships and government consultation processes.
- Recommendations for governments:
 - For States Parties to the UN Convention against Corruption, deliver on obligations related to expanding e-government mechanisms and share best practices on technological innovations and electronic services to public service delivery.
 - Treat the private sector as a resource, partner and consumer with needs and wants when it comes to e-government. A government strategy to engage actively with business is called for when seeking to develop e-government reform.
 - Enlist the support and expertise of the private sector to help overcome technical challenges, thereby improving the development and delivery of e-government strategies
 - Consider the introduction of end-to-end processes including full payment transaction services and making the use of e-government tools obligatory from the outset

to increase their effectiveness and reduce bribery.

- Promote public sector staff secondments to the private sector and vice versa.

Recommendations for further research and actions in the following areas:

- Examining the role and contribution of the private sector in e-government to ascertain the effectiveness and current acceptance of e-tools in preventing corruption. Such research could also shed light on the incentives for private sector engagement in using e-government tools.
- Comparing the advantages and challenges of adopting e-government solutions to mitigate bribery risks versus a ‘big bang’ approach to curbing corruption.
- Developing a database that maps the optional and obligatory e-government tools for all countries for companies.
- Creating a web-based application using algorithms to rate user satisfaction of e-government by companies (and others) that would help to broaden understanding and knowledge of successful and weak e-tools.
- Convening multi-stakeholder conferences bringing together public and private sectors engaged in e-government, software developers, end-users, academia, and civil society to brainstorm the best approaches for e-government and its implications for anti-corruption that could produce insights into this rapidly evolving subject.

2. Introduction

E-government is not new; it has been steadily developing over several decades and is now found in most countries in some form or another. It can reduce discretionary decision-making by public officials and enhance the efficiency and equality of interactions between governments and citizens. Many policymakers and researchers thus believe that e-government plays an important role in reducing corruption and increasing transparency.

Companies are not always consulted in relation to the development of e-government and corruption risks as they affect the private sector, and yet international organisations, civil society, and governments often expect them to actively support e-government. It is also clear that e-government alone will not solve corruption; it has to be supported and accompanied by other measures, and to be embedded in a whole-of-government strategy to be effective.

To date, the literature addressing the effectiveness of e-government has focused on the relationship between citizens and governments, leaving gaps in research on e-government's impact on businesses. More evidence on such impact would encourage more companies to use e-tools. Currently many firms do not systematically consider e-tools and digital technologies to reduce their exposure to bribery risks. Integrating the existence of such tools into anti-corruption risk assessments, management systems, and anti-corruption compliance training programmes is rarely standard practice for companies.

Some companies however, have taken a proactive approach to e-government and other forms of digital innovation in their internal anti-corruption programmes and are encouraging the review of e-tools by country managers when assessing bribery risks (see annex 1). Thus far, this approach is not widespread in the private sector, but it could be an additional means to address risks and should be an obligation within the anti-corruption compliance management programme.

The objective of this paper is to elucidate e-government and its relation to curbing and preventing corruption from a company perspective. The focus is therefore on the

relevance, demand and usage of e-government tools by the private sector, and related motivation to reduce the risks of corruption. This study is predicated on the notion that e-government tools reduce the risks of bribery of public officials, as these reduce or replace face-to-face interactions, thus limiting the opportunities for bribery.

The first part of this paper traces the development of e-government, the definitions and scope of e-government and its relation to corruption. The findings of the Basel Institute's E-Government survey to address the questions below are reported in section 4. Models of e-government and country examples for businesses to inform their own strategies or risk assessments are discussed in section 5. The conclusions and ideas for next steps and further research are set out in section 6. The underlying core questions to the survey, desk research and literature review are the following:

- Is the private sector familiar with e-government applications, and are they instrumental in preventing or curbing corruption?
- Do companies take e-government applications into account in their (bribery and corruption) risk assessments?
- Do e-government or other digital applications incentivise companies to develop new business or to expand existing business in countries that have such tools and applications?

3. E-government and corruption

E-government is ubiquitous and broad; nearly every form of government service and its delivery have the potential to fall within the remit of e-tools and services. Government platforms that provide transparency portals with information on government procurement procedures and tenders, online bidding process, customs clearance portals and payment facilities, are some examples. Other tools benefit both citizens and businesses: online applications to obtain identity cards, passports, visa services, education, information on accidents and natural disasters, and so on.

The development of e-government has not necessarily been driven by policy goals to prevent or reduce corruption. Nevertheless, an important consequence of the increased use of effective e-government tools is reduced interface with government officials, as well as better documentation. This is relevant to the private sector because companies' bribery risk assessments often include information on the level and frequency of interactions with public officials in connection with business activity. Such interactions are often classified as potentially presenting increased bribery risks often warranting risk mitigation measures. The alternative to such measures is to reduce or eliminate personal contact with government officials. The presumption is that by removing face-to-face exchanges with public officials, opportunities for bribery will decline or cease altogether.

The evolution of the concept of e-government, related definitions and its scope are outlined below, followed by the correlation between corruption and e-government.

Definitions of e-government

In less than two decades, the definition of e-government broadened and shifted away from its roots in information dissemination to transactional functionality and expanded to incorporate aspects of social inclusion. More recently, the definition has shifted away from government-driven approaches towards participatory forms of interaction that will likely continue to drive its scope, development, and definition in future. E-government is therefore not a static

concept, and how it evolves and absorbs new elements in future will similarly inform how it is likely to be defined. The role of the private sector and the benefits of e-government tools to business have not been explicitly referenced until relatively recently, as is apparent from the summary of the development of the definition compiled by the UN and set out in Annex 2. The UN E-Government Survey 2016 explains this trend:

'This shift is from the current people-centric model, whereby governments know and anticipate people's and businesses' needs, towards a people-driven model, whereby citizens and businesses determine their own needs independently from authorities and find solutions in partnership with governments. The vast networking opportunities opened up by new media channels are replacing the traditional 'upon-request' participation model (i.e. people are asked to participate when public authorities ask them to do so) with an 'on-demand' dimension whereby citizens do not wait for an invitation to contribute, but rather do so independently according to their own needs.'

This trend suggests that **businesses should proactively identify how and where e-government tools could address their requirements and develop partnerships with government and others who can help deliver such solutions.** It would appear that the focus thus far on citizens has meant that business has remained in the background or even passively awaiting government to deliver. There are **opportunities for businesses to drive the processes to develop e-government** more pro-actively in some countries, ultimately contributing to reduced corruption.

The OECD's definition of e-government focuses on governments' use of information and communication technologies (ICT), and particularly the Internet, as a tool to achieve better government. Digital technologies refer to ICT, including mobile technologies and devices, as well as data analytics used to improve the generation, collection, exchange, aggregation, combination, analysis, access, searchability, and presentation of digital content, including

for the development of services and applications. Digital government refers to the use of digital technologies as an integrated part of governments' modernisation strategies to create public value. It relies on a digital government ecosystem comprised of government actors, non-governmental organisations, businesses, citizens' associations, and individuals, which supports the production of and access to data, services, and content through interactions with the government.¹

The World Bank identifies e-government relationships across three modalities:²

Government to Citizen (G2C): deals with the relationship between government and citizens. G2C allows citizens to access government information and services instantly, conveniently, from everywhere, by use of multiple channels.

Government to Business (G2B): consists of e-interactions between government and the private sector. The opportunity to conduct online transactions with government reduces red tape and simplifies regulatory processes, therefore helping businesses to become more competitive.

Government to Government (G2G): governments depend on other levels of government within the state to effectively deliver services and allocate responsibilities. In promoting citizen-centric service, a single access point to government is the ultimate goal, for which cooperation among different governmental departments and agencies is necessary. G2G facilitates the sharing of databases, resources and capabilities, enhancing the efficiency and effectiveness of processes.³

The definitions of e-government relationships should also be viewed in context: Where e-government services are offered alongside antiquated laws and procedures, the

utility to citizens and businesses may be marginal. An example is provided by the case of India's passport services computerisation project that resulted in both online and offline passport applicants having to pay bribes to the police inspector to get past the police verification stage (as this was reported in 2007, it may no longer be the case). The researcher concluded that offering a G2B or G2C service when rent-seeking government inspectors continue to play a central role may confer some efficiency benefits on a government agency, but almost no relief to a citizen or business (Ojha, 2008). This clearly highlights the complexity of implementing effective e-government to fight corruption and how important whole-of-government processes are in this regard.

The scope of e-government

There are numerous tools that comprise e-government, the table below describes a selection and includes those covered in the Basel Institute's E-Government Survey (see next chapter).

1 Recommendation of the Council on Digital Government Strategies, OECD, 15 July 2014 at: <http://www.oecd.org/gov/digital-government/Recommendation-digital-government-strategies.pdf>.

2 See <http://www.worldbank.org/en/topic/ict/brief/e-government>.

Tools	Definition / Description
E-Communication with Government	Platforms (usually e-mail based) that enable direct access to government departments to obtain information and advice. These may also be secure or encrypted channels or part of SWS (see below).
E-Customs	The use of Information Technology to carry out customs compliance using electronic communications channels replacing paper format customs procedures. The scope of e-customs can vary widely, and may include any or all of the following: information on tariffs and duties, preparation, filing and tracking of customs declarations.
E-Filing of Taxes / E-Taxes	The process of filing taxes over the internet using tax preparation software approved by a relevant public authority of a country.
E-Invoicing	The electronic transfer of invoicing information (billing and payment) between business partners (supplier and buyer). It is part of an efficient financial supply chain and it links the internal processes of enterprises to the payment systems.
E-Licensing	The process of individuals/companies/other entities applying online for and receiving a particular license from a registered (government) agency.
E-Platform	An online platform that is used to provide centralised access for users to multiple e-government services and information.
E-Procurement	Information and/or transactional internet-based portal facilitating the requisitioning, ordering, and purchasing of goods and services. It is used at the public-private interface as well as in business-to-business transactions. It typically covers all stages of purchasing, from initial identification requirements all the way to payment and contract management at the end of the procurement process.
E-Residency	For individuals (foreigners) in the country issuing the e-residency. This refers to borderless, software-based digital identification through a government-issued smart ID card. This enables access to other digital services such as digital signing of documents, access to secure services, and the ability to make secure transactions.
E-Sourcing	The process of obtaining bids from different suppliers via a single online portal. Benefits include streamlining the sourcing process, reducing prices by maximizing supplier competition, and a repository for sourcing information.

Tools	Definition / Description
E-Tendering	The complete tendering process – from advertising to receiving and submitting tender-related information – is done online. Enabling efficient, paperless transactions, facilitating an expeditious exchange of information.
Single Window Services (SWS)	Parties involved in trade and transport can lodge standardized information and documents with a single entry point fulfilling all import, export, and transit-related requirements. E-information facilitates, single submission of data.
Trade Facilitation Services (TFS)	<p>The features of TFS include:</p> <ul style="list-style-type: none"> • Online access to information on export and import procedures, expedited release of goods even before customs clearance in some cases; • Simplified requirements and formalities for the release and clearance of goods, including, collaboration on the development of procedures enabling the submission of import or export data to a single agency; • Improved working methods, transparency and efficiency of customs; • Reduction, simplification and standardization of required customs data; • Modern customs techniques, i.e. risk-assessment, simplified procedures for entry/ release of goods, post-release controls, and company audits.

In recent years the scope of e-government has grown rapidly and has extended to a wide range of services. By 2014, all 193 member states of the UN had national websites, of which 101 enabled citizens to create personal online accounts, 73 to file income taxes, and 60 to register a business. For the most common core government administrative systems, 190 member states had automated financial management, 179 used such systems for customs processing, and 159 for tax management. In addition, 148 had some form of digital identification, and 20 had multipurpose digital identification platforms. E-procurement systems have been implemented in 193 countries and Customs Management Information Systems exist in almost every country; with some 179 described as fully operational, of which 144 permit transactions.³

One respondent in the Basel Institute E-Government Survey, however, observed: 'Streamlining all potential interactions with the government to be conducted online would be helpful, however we are a long way from that at the moment'. This shows that, despite the above developments, some private sector perceptions of e-government remains sceptical. Also, while the extension and rapid growth of ICT throughout the world can be enumerated, whether e-government is successful generally, let alone have an effect on corruption, are aspects difficult to quantify. Assessments by several experts of what constitutes successful e-government examine the cost of implementation. It has been argued that a third of all ICT initiatives are a total failure and that more than half are partial failures, especially in developing countries (Heeks, 2003 and 2008). The benchmark for these conclusions is based on cost savings modelled on a Western perspective, with new technology costs being outweighed by labour-saving costs (Stanforth, 2006), and substantially lower wage costs in developing countries (up to ten times lower) (Heeks, 2003, Stanforth, 2006). The 179 countries that have implemented fully operational systems in customs may indeed be 'successful' when viewed in the narrow terms of the research conducted over ten years ago,

though whether they are effective in reducing corruption is less certain.

The UN has identified project successes through the relationship between the outcome of e-government projects and the quality of public institutions, with a preponderance of project successes related to the strength of institutions. This is perhaps unsurprising, but it underscores the importance of significant organisational changes, skills, and solutions that take account of issues specific to the public sector as being essential, if e-government tools are to be effective and utilised (World Bank 2016).

The rationale for e-government

At the international level, the public policy rationale for e-government centres around public administration efficiencies and streamlining governance systems to support development and services to citizens, business, and within government itself.⁴ This can be illustrated by the World Bank's mandate which includes 'assisting client countries to build the necessary institutional capability for developing electronic government applications towards improving government performance and accountability, particularly in the delivery of public services.' The World Bank seeks to achieve this mandate through the eTransform Initiative that focuses on designing and implementing transformative projects in developing countries.⁵

The World Bank has described the benefits of e-government that suggest it is something of a panacea. E-government's potential for preventing corruption is but one of a plethora of e-government's intended effects:

'E-Government can be seen simply as moving citizen services online, but in its broadest sense it refers to the technology-enabled transformation

3 See <http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf>

4 See <http://www.unodc.org/unodc/en/treaties/CAC/CAC-COSP-session6-resolutions.html>

5 See <http://www.worldbank.org/en/topic/ict/brief/e-government>.

of government – governments’ best hope to reduce costs, whilst promoting economic development, increasing transparency in government, improving service delivery and public administration, and facilitating the advancement of an information society.

Reducing Costs: Putting services online substantially decreases the processing costs of many activities compared with the manual way of handling operations. Efficiency is also attained by streamlining internal processes and by enabling faster and more informed decision-making.

Promoting Economic Development: Technology enables governments to create positive business climates by simplifying relationships with businesses and reducing the administrative steps needed to comply with regulatory obligations. There is a direct impact on the economy, as in the case of e-procurement, which creates wider competition and more participants in the public sector marketplace.

Enhancing Transparency and Accountability: E-Government helps to increase the transparency of decision-making processes by making information accessible – publishing government debates and minutes, budgets and expenditure statements, outcomes and rationales for key decisions, and in some cases, allowing the online tracking of applications on the web by the public and press.

Improving Service Delivery: Government service delivery, in the traditional process, is time consuming, lacks transparency, and leads to citizen and business dissatisfaction. By putting government services online, e-government reduces bureaucracy and enhances the quality of services in terms of time, content, and accessibility.

Improving Public Administration: E-Government administrative components, such as a computerized treasury, integrated financial management information systems, and human resource management systems,

lead to greater efficiency in public administration. Features include the integration of expenditure and receipt data, control of expenditure, human resources management, intelligent audit through data analysis and the publishing of financial data.

Facilitating an e-Society: One of the main benefits of an E-Government initiative consists of the promotion of ICT use in other sectors. The technological and management capacities required for E-Government administration encourage, in turn, the development of new training courses and modules in schools and universities trying to supply the required skills and capabilities to the market.’ (World Bank, 2016).

Whilst the potential benefits of e-government are wide ranging and appear to be manifold, e-government cannot be achieved overnight. Researchers at the eGovlab⁶ point out that before benchmarking of the quality of government services is possible, there must be some standard measure of evaluation. Before a measure of quality of online information can be implemented in any government system, it must be tested to ensure it can be used for benchmarking in various types of government agencies. Such a test should indicate: (i) if the government agency is ready for implementing the requirements, (ii) that requirements can be checked by the public and the clients of the services, and (iii) they can be designed in a way as to increase the trust of the public towards the government agency.

The UN has moved away from describing the maturity level of a country in relation to its e-status, although the reality is that implementing e-government is a gradual process. **For companies conducting business or thinking of entering a market, it may be helpful to understand the state of readiness and maturity of a country’s e-government, and of course to identify gaps.** There are numerous country-specific or regional studies that describe the status

⁶ eGovlab is based at Stockholm University, Sweden, and comprises teams of researchers collaborating on ICT government transformation. See <http://www.egovlab.eu/index.php/en/about-us>.

of e-government and what progress has been achieved through a step-by-step approach, such as in a 2012 paper on e-government for transparency, anti-corruption, and accountability in Central America (Coroan and Criado, 2012). The researchers noted that Central American countries have been innovative in their use of legislation in order to promote transparency, accountability, and anti-corruption efforts by stipulating, for example, in the laws relating to access to public information that the use of technology be included to improve the right of access to information. But the study also acknowledges that success has been limited when it comes to implementing technology to foster good governance, but progress no matter how modest, is to be encouraged.

Whole-of-government and public-private partnerships

While initial e-government initiatives were aimed at automating public sector processes and streamlining services within and across government organisations, the focus has increasingly shifted to the provision of seamless information flows and the facilitation of collaborative decision-making (Mahmood, 2014). This has resulted in a conceptual shift towards a view of e-government as a means to enable whole-of-government service delivery, policy integration, and increased transparency and accountability through the use of open government data and participatory service delivery and decision-making (UN, 2016).

E-government requires a whole-of-government strategy to make it effective, which in turn demands an enormous amount of planning, commitment across government layers, energy, and vision. It therefore takes time to achieve, and examining isolated e-government solutions may be too limited or too early because the context of e-government needs to be taken into account. A holistic approach to tackling e-government requires accompanying measures that address institutional weaknesses, legal and regulatory reforms, as well as the crucial issues of connectivity and

coverage; these aspects can be as critical as the e-tools themselves. The so called 'digital divide' means that access to ICT still varies greatly within many countries, and occurs more frequently in developing and transition countries. This may result in the involuntary creation of inequalities, both in terms of access to public services and markets for individuals as well as businesses, thereby creating an uneven playing field for businesses and undermining healthy competition. To avoid this risk, considerable investments in bridging the digital divide may therefore be required. Governments must understand that as a consequence, while costs are likely to be reduced in the long-term, this reality may increase costs both for the public and private sectors in the short- and medium-term.

Whole-of-government approaches require the capacity to integrate consultation processes not only with citizens but also with the private sector. Companies are not only a resource to support the delivery of e-government, but also an essential source of information to ensure that the design and delivery of e-government is responsive to their requirements. It would appear that in many countries the notion of consultation specifically involving the private sector is still underdeveloped. **Fostering dialogue at all stages of e-government development with the private sector may increase acceptance levels where e-government tools are optional.**

The existence and quality of the whole-of-government e-government strategy, its maturity and implementation status should be included as part of country corruption risk assessments. **Such assessments should be routinely carried out with respect to business processes, as well as in the context of due diligence related to business partners, joint ventures and mergers and acquisitions. Companies should consider how to weight e-government tools in the context of their assessment of a country's e-government strategy and anti-corruption efforts.** Where possible, companies should consider the quality of e-government functionality, as well as online information relevant to entering a new market, e-government procedures and authorisations. Understanding the full

context of a country's anti-corruption strategy in relation to its e-government tools can help a company to determine whether to use the e-tools where this is optional.

Public-private partnerships to develop e-government tools provide opportunities for the private sector to contribute. They may also provide a route for dialogue and closer alignment with business requirements. Where government consultation processes exist, the private sector should engage when given the opportunity. These offer opportunities to impact policies and advocate private sector positions. Actively participating in these processes signals commitment and expectations to the government on policy areas key to companies, including anti-corruption and anti-bribery.

Defining corruption in the context of e-government

The literature cites various definitions of corrupt behaviours. The UN references 'the misuse of public office, power or authority for private benefits through various means such as extortion, bribery, nepotism, influence peddling, fraud, speed money or embezzlement.' The NGO Transparency International defines corruption as the abuse or misuse of entrusted power for private gain (TI, 2012),⁷ and this definition can be applied to both the public and private sectors. The World Bank describes the activity as follows: 'Public office is abused for private gain when an official accepts, solicits, or extorts a bribe. It is also abused when private agents actively offer bribes to circumvent public policies and processes for competitive advantage and profit.'⁸

The nature of corruption relevant to e-government is commonly referred to as administrative or bureaucratic

corruption, ranging from petty to grand corruption. The latter may for example be manifested in large public-sector projects such as the procurement of infrastructure, whilst petty corruption is paid in smaller amounts but possibly on a more regular basis or by larger groups of citizens or businesses seeking to obtain government services. These can be small amounts at the time of transfer, but over time they can accrue to substantial sums that may also be passed up the hierarchy to senior public officials. Both the grand and petty scale of corruption should in theory be reduced through government e-solutions, such as e-procurement, e-customs, and trade facilitation programmes.

The deleterious economic effects of administrative corruption have been described in several studies and include 'reduction in effectiveness and efficiency of public services, inflated transaction costs, distorted incentives, and undermining the rule of law' (Marquette, 2012). The World Bank describes corruption as 'one of the single greatest obstacles to economic development and social development' (World Bank, 2011). The response to corruption by the World Bank and other international organisations as well as governments is to develop multiple approaches to tackle the issue from different angles. The aims of such approaches are to reduce opportunities for bribery and strengthen government institutions and the rule of law. The introduction of e-government platforms and digital tools can contribute to greater transparency, and as such they are promoted by international organizations and the World Bank as being key elements to help tackle corruption in government services.

Research and the correlation between e-government and corruption

If whole-of-government is now considered as the best way to ensure successful e-government development and implementation, research and related literature to substantiate this, is sparse and lacking. Other limitations

7 See <https://www.transparency.org/what-is-corruption/#define>.

8 See <http://www1.worldbank.org/publicsector/anticorrupt/corruptn/cor02.htm>.

of the literature have been identified as including the constraints of anecdotal or experiential evidence because e-government projects are viewed as distinct or unique.

A recent review of e-government research notes that it is a relatively young discipline and is still evolving as new technologies emerge and e-government continues to spread. The various approaches to e-government research have been identified as including qualitative, pure quantitative, and mixed methods, whereby case studies and surveys are the dominant methods used by e-government researchers (Yusuf et al., 2015).

Writings on e-government and its effects on corruption are growing rapidly, and because e-government spans multiple research domains that include computer and technological sciences, public administration, economics, and political science, it is also described as sprawling (Heeks, 2008). That said, literature relevant to the correlation between corruption, e-government, and the private sector is still scarce, with more research on the effects of e-government on corruption and the private sector needed.

Literature that assesses e-government and its effects on corruption diverge: The focus is either on a specific country or it is descriptive or limited to a small sample of relatively homogenous cases (Heeks and Bailur 2007, Ojha et al., 2008, World Bank, 2016). Such studies include the examination of the social and/or the economic effects of e-government, and they may include corruption-related indicators, although this is not a consistent element (micro approach). The alternative involves a review of e-government tools using comparisons of multiple jurisdictions and indices to assess effectiveness of public administration reforms, often from the citizen perspective (macro approach). It is assumed that both approaches may contribute insights relevant to the private sector.

E-government and corruption assessment is fraught with data collection problems due to the nature of the offence (Ojha, 2008). In determining whether the literature sheds light on the effectiveness of e-government to curb corruption,

several authors urge a cautious approach due to factors such as the involvement of the writer in the e-government tool in some way (such as being an IT vendor), or because the authors had direct roles in the projects, products, or services their papers described, with a consequence that there is a tendency towards the optimistic in terms of its effectiveness. On the other hand, writings by vendors and other implementers of digital solutions should not be entirely discounted, because they should be well placed to understand the goals and purpose of the government's approach as well as being best placed to describe the technical specifications and potential of the e-tools (Heeks, 2008).

According to the World E-Government Rankings, historical data shows that there is a strong positive correlation between e-government development and the TI Corruption Perception Index (CPI). Countries with high corruption rates in the public sector will generally score poorly on their ability to deliver public services via ICT, including the provision of open government data (UN, 2016). The UN report concludes that the level of e-government is positively related to progress in some areas of the Sustainability Development Goals, notably competitiveness and combating corruption.

The hypothesis that ICT holds promise for the reduction of corruption was first discussed in the analysis conducted by Jamshed et al., where the relationship between e-government and corruption is examined and then investigated to see if changes in the use of ICT are linked to changes in levels of corruption in countries. The authors also examined whether developed or developing countries benefit most from greater use of e-government. The results indicate that as the use of e-government increases, corruption decreases. Specifically, the models suggest that a 1% increase in the e-government index may have resulted in a 1.17% decrease in corruption. Developing countries were also found to have benefitted the most from the increased use of ICT in the seven-year period between 2003 and 2010.

In a background paper to the World Development Report 2016: Digital Dividends, researchers note that most

countries in the world have developed their capacities in ICT over the last twenty years to improve revenue mobilisation, budget preparation and execution, and to improve delivery of services to citizens. The background paper states that it is the first to examine systematically the effects of e-filing cross-nationally. The research highlights both the potential and the limitations of ICT, noting that the extent to which government processes can be automated will likely impact the capacity of e-government tools to reduce corruption. The quality of institutions, IT infrastructure, technology, and human capital will also affect the impact of e-government on corruption. In other words, the complexity of corruption and the solutions required to address it cannot be resolved by e-government alone (Kochanova, 2016).

The functionality of e-government systems is also relevant to their impact on corruption, as described below. E-filing for taxes functionality comprises (i) informational systems covering policy guidance and forms to download, (ii) transactional systems that allow taxes to be filed electronically, and (iii) transactional systems with functionalities that enable e-payment combined with filing and money transfer (World Bank, 2016).

The World Bank study found that the adoption of e-filing reduced tax compliance costs as measured by the number of tax payments, time required to prepare and pay taxes, the probability of tax inspections and visits by tax officials, and the perception of tax administration as an obstacle to firms' operation and growth. It was also noted that the solicitation of bribes to public officials was reduced. The researchers also tested for the potential distortion of the results due to policy reforms that coincided with the adoption of e-filing. The World Bank researchers suggest e-filing implementation has an effect on corruption independent of policy reforms and the business environment.

The World Bank study similarly assessed e-procurement functionality according to three levels of bid evaluations: (i) informational systems that provide information on tenders and the results of bid evaluations, (ii) transactional systems that permit the electronic filing of bids and documents, and

(iii) connected systems in which the transactional system is integrated with other financial management information systems so that budgets, contractual commitments, and payments to vendors are automated.

In contrast to e-filing of taxes, the impact of e-government on public procurement was found to be much weaker. It was assumed that the adoption of e-procurement would increase the likelihood that firms participate in public tenders and would limit corruption. The implementation of e-procurement systems, regardless of system functionality, neither increases public procurement competitiveness measured by the propensity of firms to apply for tenders, nor does it reduce the incidence of bribery to secure a government contract. It was noted though that the likelihood that a company will bid is increased in more developed countries. Conjecture for this outcome is the issue that public procurement requires government officials to exercise their discretion in the process, limiting the scope of automation in procurement processes. Government officials will more likely have to exercise discretion when evaluating technical aspects or value for money. The sums involved are often substantial, and the relatively small number of firms bidding may make public procurement more susceptible to collusive behaviour between firms and government officials. Another explanation put forward by the researchers is that the implementation of unsophisticated informational or transactional e-procurement systems might be insufficient to the complexity of public procurement competitiveness.

The World Bank study reinforces other findings from studies that emphasise **the importance of complementary measures**, whether to inform companies about the existence of e-procurement, the necessity for changes internally in companies to obtain the benefits of ICT, and also for countries to invest and scale up access to ICT (UN, 2016). Although e-procurement may have its challenges, it does help to create audit trails and performance indicators for government, potentially leading to cost savings and more efficient processes and better documentation.

According to the World Bank, impact on corruption through

e-government varies by the type of service and activity and is based on three factors: the incentives for citizens to monitor the service and provide feedback; the extent to which the processes for the production and delivery of the service or activity are based on tasks that can be made routine and standardised; and the measurability and extent to which the outputs and outcomes from the task can be attributed to particular public actors or actions. Businesses (and citizens) have an incentive to monitor private goods or services that they use frequently. These include the range of registration and licensing services offered by one-stop shops. Tasks that are largely rule-based and clerical, or follow a standardised set of procedures, and ensure that work orders are processed in a timely way are relatively easily assessed from the user perspective. These features help explain the successful uses of digital technologies for welfare payments, water provision, and property and business registration, including through citizen feedback on service quality.

This whole-of-government approach to establishing e-government complements the established view that tackling systemic corruption requires multiple approaches that require preventive, repressive, and reformist measures throughout society. Research on 'big bang' reforms versus incremental changes in implementing e-government and anti-corruption reforms could contribute to greater understanding of how best to leverage e-government to tackle corruption effectively. The World Bank has noted that digital technology projects that it has funded are more successful in countries with better quality institutions (World Bank, 2016).

To automate these sorts of activities requires breaking down government department silos and changing administrative processes, but the quick, easily visible and attributable service improvements to citizens can yield political benefits that even corrupt politicians might have an interest in supporting, though the political economy considerations vary by activity. The mixed impact of e-filing systems, for example, reflects how these reforms can often conflict with elite interests and are likely more dependent on institutional

complements.

Literature that uses empirical evidence related to Foreign Direct Investment (FDI) as an indicator of the effectiveness of e-government to curb corruption is also limited, and studies of the private sector withdrawing from markets due to corruption risks despite the existence of e-government appear non-existent. In a study that seeks to establish a conceptual framework for the impact of e-government on transaction costs and FDI inflows, the author argues for the necessity of combining both ICT and international business literatures. He aims to establish a conceptual framework that would give a logical flow of arguments on why the relationships between e-government, transactions costs and FDI should be expected (Kachwamba, 2011). Entering a new market is often identified as presenting increased corruption risks, in particular where a business places reliance on external consultants, intermediaries, or other third parties to gather information about the host environment. Obtaining quality information on local institutions, public and private data on the costs of running a business, market size, government policies, licensing procedures, and a whole host of other information can be difficult even for sophisticated large firms, let alone smaller firms with fewer resources at their disposal. Following the preliminary information gathering process, the actual entry costs of complying with government authorisations and permits present a further set of challenges in many countries. The potential for e-government to reduce or even eliminate such corruption risks by eliminating the need for third party agents could be significant in many countries; further research on these questions could be useful for firms when assessing the effectiveness of government open data as well as transparency portals (e-portals).

Policy and International treaty support for corruption prevention through e-government

The Conference of States Parties (COSP) to the United Nations Convention Against Corruption (CAC) has explicitly recognised the benefits of tackling corruption through e-government and has issued two related resolutions in 2015 that call upon States parties to the CAC to adopt ICT strategies in order to meet their obligations under that international treaty.

Resolution 6/7 of the 2015 COSP/CAC is entitled ‘Promoting the use of information and communication technologies for the implementation of the United Nations Convention against Corruption’ and states the following:

[...] 1. Calls upon States parties to continue developing and promoting the use of information and communications technologies in order to enhance the effective and efficient implementation of article 13 of the United Nations Convention against Corruption, such as through the use of e-government mechanisms, online platforms, smartphone applications, mobile telephone-based reporting and social media; [...]

3. Recommends that States parties consider utilizing online platforms to facilitate, where appropriate, consultation with the public on issues relating to the prevention of and fight against corruption, in accordance with article 13, paragraph 1 (a), of the Convention; [...].

Resolution 6/8 of the 2015 COSP/CAC is entitled ‘Prevention of corruption by promoting transparent, accountable and efficient public service delivery through the application of best practices and technological innovations’ addresses developing and sharing best practice examples on ICT measures to prevent corruption as follows:

[...] 3. Encourages States parties with relevant expertise in the application of technological innovations and electronic

services to public service delivery to share their best practices, where applicable and upon request, and to transfer their knowledge to other States parties through appropriate bilateral, regional and multilateral channels of cooperation;

4. Encourages States parties to continue to promote those best practices for e-services in public service delivery that can lead to increasing trust in public institutions, and requests the Secretariat, subject to the availability of funding, to provide States parties with a compilation of best practices for e-services in public service delivery; [...].

The 2017 G20 Leaders Declaration on Organizing Against Corruption included a call for the expansion of public service delivery through e-services particularly in areas with high corruption risks. The Declaration references effectiveness and efficiencies and also the ‘use of tamper-proof workflows and automated procedures’ as means to help minimise opportunities for corrupt behaviour.⁹

Commentary

E-government is globally widespread and continually developing. Its success is defined by end-users, including citizens and the private sector, domestic and foreign. The acceptance and usage of e-government will be of increasing importance in engendering trust in government, which is closely linked to reducing and controlling administrative and political corruption.

Companies may be required to use e-government tools because they are obliged to do so. In some countries e-government tools may be optional. In both cases, **companies should gather data so that it can assess the benefits - and disadvantages - of using an e-tool.** Such data could help to compare the relative effectiveness

⁹ See https://www.g20.org/Content/DE/_Anlagen/G7_G20/2017-g20-acwg-anti-corruption.pdf?__blob=publicationFile&v=6

of systems in different countries. Criteria such as costs and time saving, as well as corruption risk reduction, should be the focus of such data collection. Companies that then share their experiences in relation to e-tools will contribute to raising the overall level of awareness on e-government, how it is to be effectively designed and implemented, and how it can support curbing corruption. This indirectly leads to a more conducive environment for business.

There is an inverse relationship between e-government and corruption, but much work remains to be done in many countries to develop effective e-government. Narrowing the digital divide both within countries and cross-nationally is an integral element of any e-government strategy.

These various elements are best addressed through a whole-of-government strategy. This coincides with the multiple approaches needed to tackle systemic corruption. The active involvement of all elements in society that goes beyond citizen satisfaction surveys and includes the public sector in all stages of government e-development will likely contribute to improved project design and acceptance by end-users.

4. Basel Institute E-Government Survey

Overview

The objective of the Basel Institute E-Government survey was to determine the extent to which companies are aware of and use e-tools and digital solutions as provided by governments, and to ascertain whether companies have any views or experiences that indicate the effects of such tools on bribery. To recall, the three core questions that formed the basis of the survey were: (i) Is the private sector familiar with e-government applications, and are they instrumental in preventing or curbing corruption; (ii) Do companies take e-government applications into account in their (bribery and corruption) risk assessments; and (iii) Do e-government or other digital applications incentivise companies to develop new business or to expand existing business in countries that have such tools and applications? The survey also sought to identify countries that have particularly successful examples from a business perspective. The survey responses are not definitive; rather, they are perceptions and include anecdotal evidence. Most of the answers were obtained through the online survey, the questions are set out in Annex 3. Some respondents indicated they would be willing to be interviewed and they left contact details through an independent link at the end of the survey. This ensured that their survey responses remained anonymous.

In some seven interviews with private sector compliance personnel in multi-national companies it emerged that quite often compliance officers at headquarters had limited knowledge about the extent to which e-tools are actively being used within their company in relation to anti-corruption. Reliance on procurement teams, export personnel and sales departments tends to focus on the business aspects of e-tools rather than the compliance element to prevent and reduce corruption.

The questionnaire for the survey was developed by the research team at the Basel Institute and discussed with

the sponsors as well as various organisations¹⁰ that were willing to reach out to their networks to broaden the survey targets. The survey was made public through dissemination on various websites and was open from March through May 2017.

A separate set of questions that reflected some of the key points of the questionnaire developed by the Basel Institute was included in the survey conducted by the World Economic Forum Partnering Against Corruption Initiative (WEF PACI) as part of their 'Building Trust and Integrity' project in Mexico. The results of this survey are described separately below.

Respondent profiles

There were 197 respondents to the anonymous web survey, of which 83% were private sector representatives from 33 different sectors. As illustrated in Figure 1 below, a considerable portion of the overall participation was made up of consulting services, legal services, civil society, and academia (43.7%). Other well-represented industries include the pharmaceutical and healthcare industries, construction, and heavy manufacturing. Due to anonymity parameters, it is not possible to disaggregate the replies according to response groups.

¹⁰ The Basel Institute in particular acknowledges support from Deloitte, EY, Trace International, World Economic Forum, and Transparency International in helping to publicise the survey and for sharing it with their respective networks.

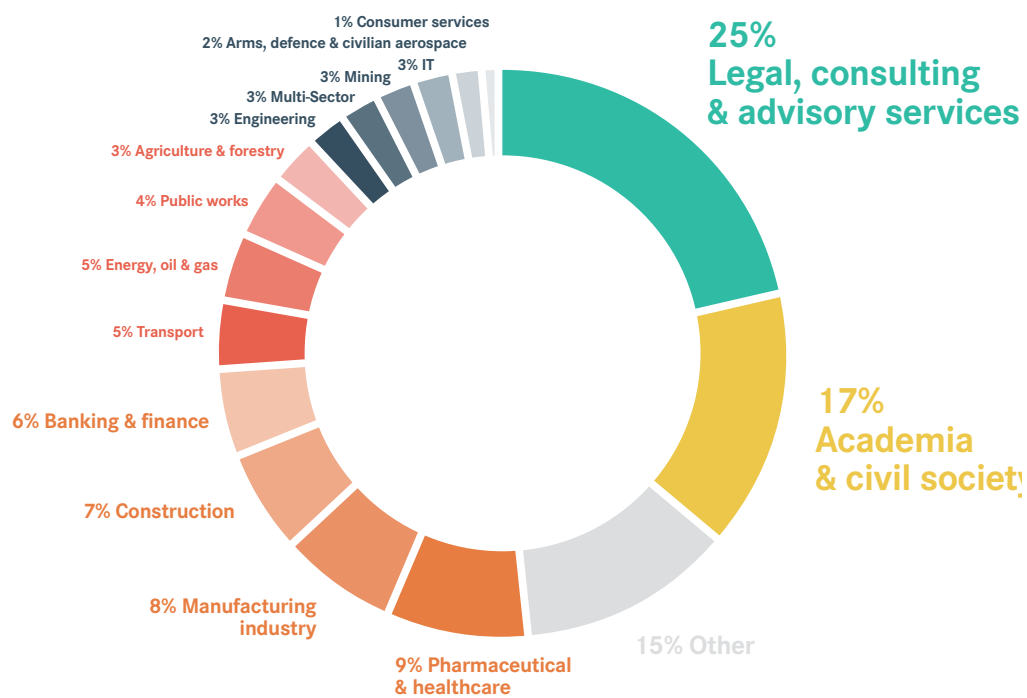


Figure 1 Basel Institute survey on e-government (April 2017): Sectoral distribution of survey participants

- Americas: 22%
- APAC: 24%
- Europe: 33%
- MENA: 22%

actively encouraged to use e-government tools, although the number of neutral and negative responses is relatively high, possibly indicating the need for more awareness raising and discussion about using e-government tools and sharing that information internally within organisations.

Formal policies (47% of those responding positively) and formal staff communications (44%) account for the main methods that require employees to use e-government tools,

Responses¹¹

As shown in Figure 2, respondents reported that they are

¹¹ In the multiple-choice questions, the respondents could choose more than one option in their answers, this accounts for the percentages exceeding 100% in the graphs.

with informal staff communications also supplementing the other two approaches (43%).

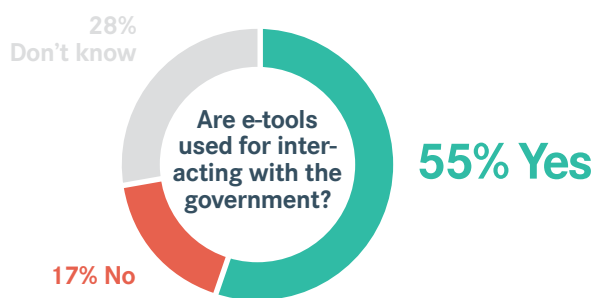


Figure 2 Basel Institute survey on e-government (April 2017): Companies using (or not) e-tools for interaction with governments.

Interviews with compliance officers in large firms indicated that the level of knowledge about the existence of e-government tools being used on a consistent or widespread basis within their organisations was generally weak. Considering the potential benefits of e-government to mitigate bribery risks and the relevance for corruption risk assessments and the potential to increase business efficiencies, breaking down information silos about e-government could be improved with a view to developing criteria and metrics to identify their usefulness.

Business efficiencies were consistently cited by the respondents as being the main driver for using e-government tools, with time-savings being an important factor. Similarly, reducing the risk of a demand for a bribe was given as an important factor (see Figure 3). This response may have been influenced by the fact that respondents may be familiar with the anti-corruption work of the organisations that circulated the invitation to participate in the survey, creating a bias towards this response. Further research would be needed to explore this aspect further.

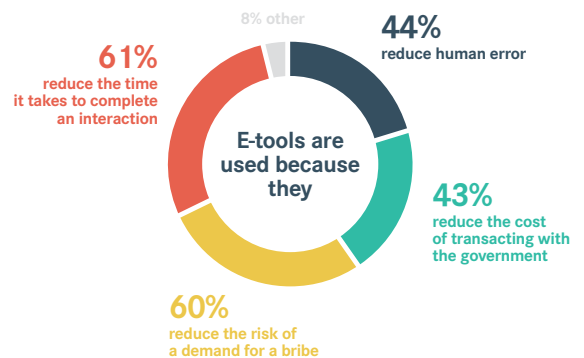


Figure 3 Basel Institute survey on e-government (April 2017): Reasons indicated by businesses for using e-tools. More than one choice of response was permitted.

According to the responses received, the most frequently used e-government tools were e-filing of taxes and e-procurement (Figures 4 and 5).

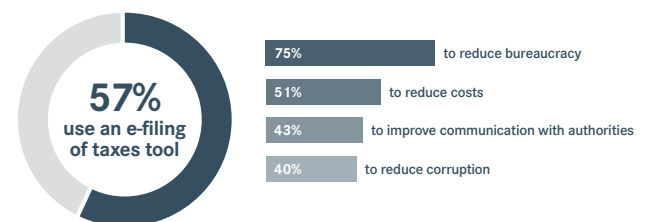


Figure 4 Basel Institute survey on e-government (April 2017): Percentage of companies using an e-filing system for reporting taxes. More than one choice of response was permitted.

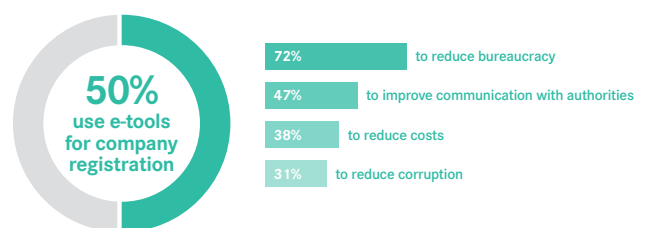


Figure 5 Basel Institute survey on e-government (April 2017): Percentage of companies using an e-tool in the context of public procurement. More than one choice of response was permitted.

Closely related to e-procurement is e-sourcing, though it is a distinct process and not an e-government tool, but rather a B2B tool. It was included in the survey given the similarities with e-procurement and the fact that it is regarded by businesses as helping to reduce corruption. E-sourcing consolidates proposals, quotes, and bids from suppliers in one central hub for ease of comparison. As companies may spend anything between 50%-70% of their budgets on supplies, cost reduction is identified as the main reason for using this e-tool (Figure 6).

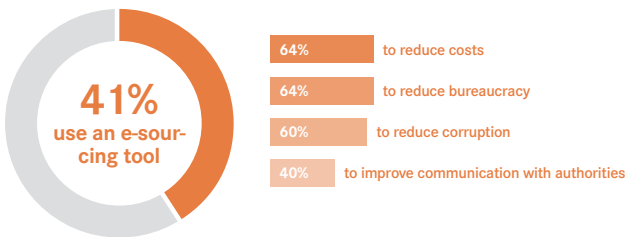


Figure 6 Basel Institute survey on e-government (April 2017): Percentage of companies using an e-tool for sourcing. More than one choice of response was permitted.

In view of the fact that many governments around the world have implemented e-customs, the relatively low level of take-up indicates that there is more work to be done to encourage or require the use of e-customs tools and other trade facilitation portals. Where companies do use e-customs, it is overwhelmingly to reduce corruption and bureaucracy (Figures 7 and 8).

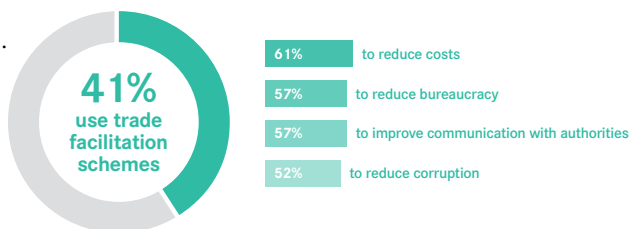


Figure 7 Basel Institute survey on e-government (April 2017): Percentage of companies using trade facilitation schemes. More than one choice of response was permitted.

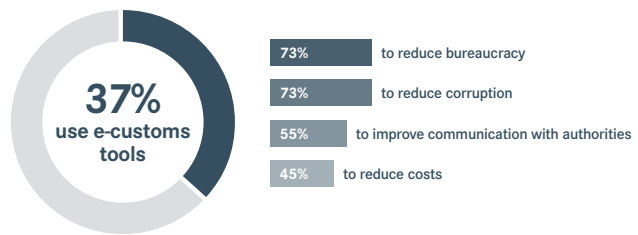


Figure 8 Basel Institute survey on e-government (April 2017): Percentage of companies using an e-tool for customs-related processes

The use of e-registration of companies can significantly reduce time and procedures required to register businesses. As shown in Figure 9, this is the third most frequently used e-tool among survey participants, it is the area in which the motivation among users most strikingly diverges between the aim to reduce bureaucracy (72) and to reduce corruption (31%), with this being the field in which corruption reduction as a motivation received the lowest score. Many countries offer such a service with varying speeds promised for the registration process depending on the legal entity. Estonia, for example, permits e-registration by non-Estonians, electronic signature of documents, and automatic transfer of registration documents to the central commercial registry and the court register.

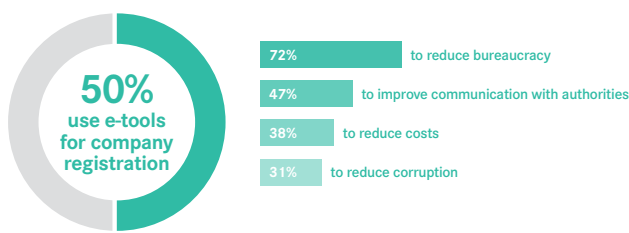


Figure 9 Basel Institute survey on e-government (April 2017): Percentage of companies using an e-tool in the context of registering a company. More than one choice of response was permitted.

With only 47% of respondents indicating that they communicate with government authorities via e-platforms (Figure 10), there appears to be scope to increase this method of interaction in many countries, with efficiencies and improved communication as the drivers for improving take up.

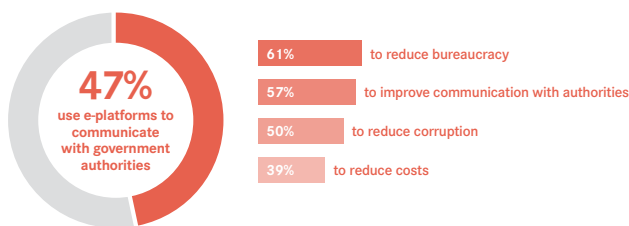


Figure 10 Basel Institute survey on e-government (April 2017): Percentage of companies using an e-tool for communicating with government authorities. More than one choice of response was permitted.

Figure 11 indicates that the number of respondents that have used e-residency tools is low. E-residency is a government-issued digital ID that enables the user to establish and register a company in the country offering e-residency. Estonia claims to be the first country to offer such a service; recent reports suggest that applications by UK citizens to obtain e-residency in Estonia have increased since the announcement of Brexit. If e-residency catches on elsewhere in the world, there may eventually be competition between countries when it comes to offering services such as banking, taxation, and other services based on the quality of the user interface.

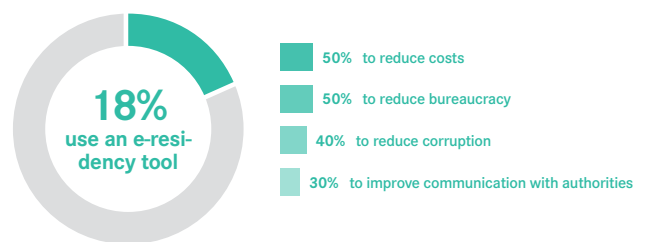


Figure 11 Basel Institute survey on e-government (April 2017): Percentage of companies using an e-residency tool. More than one choice of response was permitted.

Speed and quality of coverage and connection as well as infrastructure complexity may be decisive when choosing a location for e-residency (and for that matter, more generally when the use of e-government tools is optional).

A summary of the main reasons why respondents use an e-tool (reducing corruption and reducing bureaucracy) is set out in Figure 12.

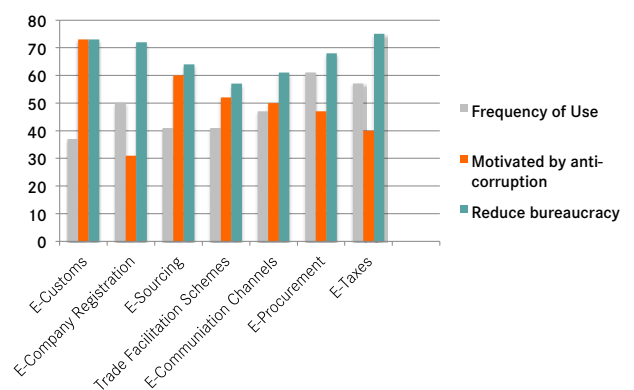


Figure 12 Comparative Overview of Results from Basel Institute E-Government Survey Focusing on Frequency of Use of E-Tool and Related Motivation to Reduce Bureaucracy versus Corruption

Do e-tools enable bribery too?

In responses relating to e-tools that could inadvertently enable bribery, it was noted that the quality of e-government is crucial, as well as how the e-tool is implemented. Comments by some of the 16% who said they had observed bribery being facilitated through e-tools included the difficulty of use, manipulation of property or tax registers, and lack of interagency or intergovernmental linkages so that using an e-tool in one government department did not reduce the opportunity for bribe solicitation by corrupt officials in another government department that did not have access to the e-tool. Some commentators highlighted the risks that vulnerable groups face if they are unable to cope with the e-tool and must rely on corrupt local officials for assistance.

The WEF PACI survey in Mexico¹²

The ‘Building Foundations of Trust and Integrity’ project was a three-year collaborative project between the WEF Partnering Against Corruption Initiative (PACI) and the Infrastructure and Development community at the WEF. The project identified key corruption risks within the engineering, construction, and real estate industries. As part of the project, a survey was conducted in Mexico, the aim of which was to explore the challenges and opportunities for rebuilding integrity and trust in business and institutions. The survey analysed the perception of corruption, trust, and integrity to understand the most pressing concerns, potential challenges, and innovative solutions for stakeholders.

The primary respondents were from the private sector (71%), followed by the public sector (21%) and civil society (8%). From government, the responses were mainly at the Mexican Federal level (80%), with others from the central bank, public research centres, and chamber of commerce (13%), and finally the state level (5%).

The private sector respondents were from a cross section of Mexican industries, including infrastructure and urban development (11%), consumer goods and lifestyle (15%), construction (9%), banking and insurance (8%), and real estate (8%), with 32% categorised as ‘other’, including transport, telecommunication, consulting, and legal industries. Some 80% of the industries that replied were privately owned.

69% of the respondents answered no and 31% answered yes to the question Has your organisation or institution expanded its business or entered a new market on the basis of technological solutions/tools that exist in those markets?

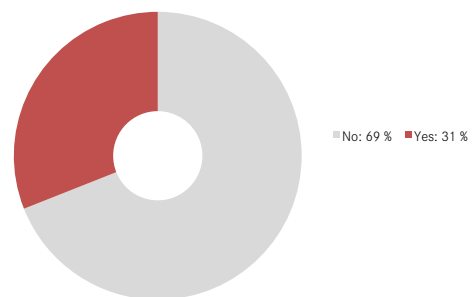


Figure 13 WEF PACI survey Mexico: Responses to the question as to whether the respondent’s organisation or institution expanded its business or entered a new market on the basis of technological solutions/tools that exist in those markets.

Those who responded positively cited the technological tools/solutions as including open data, Internet bidding, Compranet, the Observatory of Public Spending in Brazil, Mapa Regalías in Colombia (which enables citizens to track the spending of mining royalties in real time), the UK database on company information, big data background searches, and automated valuation modelling for the real estate industry. When asked which new markets they have expanded to or entered, the Mexican respondents named the US, China, UK, Spain, Hong Kong, Finland, France, and Germany.

¹² The questions and answers from the Mexican survey that are referenced in this section are only those relevant to the scope of this paper.

To the question Have you come across any technological solution that has inadvertently enabled bribery? 89% were negative and 11% confirmed that they had encountered tools that had facilitated bribery. Examples included state-level systems for property tax payments, opening of a company on the Internet, banking transactions by smartphone, e-banking, Compranet, Bitcoin, and e-procurement manipulation.

In contrast to the perspective of the previous question, there were positive responses to the likelihood that technology can enable integrity with over 80% of respondents agreeing to this proposition.

In parallel to the survey, the WEF PACI and Consejo Coordinador Empresarial of Mexico held a workshop with business leaders, government ministers, academic experts, and leading NGOs to test the findings from the survey and to identify solutions.

Commentary

The results of the Basel Institute E-Government Survey provide some insight into the views of the private sector, their use of government e-tools, and their views on the benefits, room for improvement, and direction for future development, even though the number of responses combined with the wide range of sectors and countries necessitates a cautious interpretation of the survey results.

From interviews with respondents, we attribute the relatively high number of partially completed surveys to the time-consuming task of obtaining answers (particularly for large organisations) from all the various departments that might be using government e-tools. The fact that there is seldom a single contact person or knowledge centre within an organisation that can respond for the whole entity with regard to the use of e-government tools was apparent in all discussions with companies. The survey stipulated that the respondents give their answers in relation to a country of the respondent's choice; this was to reduce the complexity

that the responsibility of having to answer for multiple jurisdictions would have produced. A detailed analysis of a specific country and the identification of residual risks would require a multiple-industry review in that location. This could produce an interesting analysis of the business experience of e-government in a specific country, but so far this has not been undertaken. Countries that have implemented a Single Window for customs or other trade facilitation improvements would be particularly interesting to analyse given the limited research on this to date.

In five of the seven e-tool fields, the difference between users' motivation to reduce bureaucracy and reduce corruption was less than 20 points. The difference among the broader range of benefits of e-government, namely the decrease in bureaucracy, cost savings, improved communication with government, and the reduction of corruption, ranged from around 20 to 40 points depending on the field, suggesting a relatively homogenous view of the usefulness of all e-government tools. That said, the edge given in the responses to the reduction of corruption through e-customs and e-sourcing tools was also strongly reflected in the comments received from respondents and in interviews, and probably also reflects the risks associated with these activities and their importance for businesses. The striking discrepancy between the low frequency of use of e-customs, yet the highest perceived benefits of using e-customs to this end, gives rise to a clear indication that expanded use of e-customs tools for corruption prevention should be encouraged.

Overall the survey indicates that reduction of corruption is not the primary reason to use e-tools among respondents, rather is one of a number of benefits related to business efficiencies. This is a missed opportunity. In many instances companies could do more to inform their compliance teams as well as business functions about the availability and usefulness of e-government tools as part of the active management of corruption risks. Further work is clearly needed **to highlight the possibilities that e-tools offer to the private sector as part of their anti-corruption compliance programmes, and the obligation to consider using them should be**

included in anti-corruption policies or similar documents. Furthermore, it appears that employees often have limited knowledge about the availability and relevance to their businesses of e-government tools. Compliance functions (particularly at global headquarters) are often unaware of the extent to which e-government tools are currently being used throughout their organizations both in terms of which locations, and which company operations are using them. **Companies should actively make their employees aware of e-government tools and the role they can play in preventing corruption.**

As one respondent put it, 'If the tools are just for administration, this is nice to have for efficiency. Tools should promote more transparency not just efficiency; this is crucial to prevent corruption.'

Reliability and consistency of availability of e-tools were mentioned as being important when firms are contemplating whether to use them at all (assuming usage is optional). The credibility of an e-government strategy will ultimately be reflected in the level of user acceptance and user satisfaction. In many cases, both countries and companies could probably do more than they currently do to make known the benefits and savings that e-tools provide. One respondent noted that it would be motivating to use an e-tool if it is known upfront how long it will take to upload information and documentation and also how long the approval process will take (where applicable). Where trust in government is low, the level of trust in the efficiency of government e-tools also risks being weak, particularly if interactions with public officials are still required within a process. In this connection, it was noted that e-tools should be subject to independent and trustworthy audits, including opportunities for the users to present their cases and experiences. An example of a weak e-government tool was cited by a respondent in the following terms:

I am convinced that the e-procurement platform could reduce corruption and litigation if properly managed. Currently the e-procurement process has loopholes that allow the operators (government employees that feed data

into the system) to 'manage' and delay at their discretion the timing of postings sent by bidders, and this affects both the transparency of the process and the fairness.

A well-designed and -implemented e-tool will be used and supported by the private sector as some of the comments received indicate. One such example relates to the real-time tracking of royalty payments and other expenditure management systems for payments involving government officials, or electronic contracting platforms such as NIPEX, the Nigerian electronic contracting platform for the petroleum sector. Overall, the streamlining of all potential interactions with the government, reducing personal contacts as much as possible, was throughout the questionnaire identified as the priority going forward and a goal to work towards.

5. Country examples and models of e-government

Introduction

The country examples and models of e-government below have been selected on the basis of writings that describe them in positive terms. They have not however, been endorsed or cited by the private sector. In the Basel Institute survey respondents were asked to identify specific e-tools or countries that would be worthy of note in terms of reducing or preventing corruption, but no such information was received, it is therefore acknowledged that the selection below could be replaced by other examples.

This chapter starts with a description of Single Window Services (SWS). The challenges and characteristics of establishing e-government can be exemplified by the development of SWS. For countries that have under-developed or non-existent e-government strategies, the SWS could be used as a pilot for the whole-of-government coordinated and systematic approach needed for an e-government implementation plan.

Trade facilitation measures and SWS: A microcosm of e-government implementation

Customs-related corruption costs World Customs Organization members at least USD 2 billion in lost trade taxes each year. This is despite 179 countries having established automated customs services. It is estimated that full implementation of the World Trade Organization's Trade Facilitation Agreement (TFA), which would ensure transparency, predictability, and accountability in global trade, could reduce the costs of delays and uncertainty between 12-18%. The TFA's specific provisions for promoting integrity and impartiality could alone reduce trade costs by up to one percentage point.¹³ These facts make e-customs

a highly relevant issue for most of the countries in the world.

The United Nations Economic Commission for Europe (UNECE) definition of the Single Window is included in the table in chapter 3 above. A more generalised description defines the concept as essentially based on the implementation of trade facilitation tools whose primary purpose is to simplify and harmonise processes associated with cross-border movement of goods (Ndonga, 2015). The apparent efficiencies afforded by the implementation of SWS are not yet the subject of cross-national research; rather, the focus thus far has been descriptive of country implementation. It may yet still be in the early days for comparative research, given that the World Trade Organization only finalised the TFA in Bali in 2013, with cost reduction, speed, and efficiency as the main focus of negotiations; corruption prevention was not at the forefront of discussions (Kassee and Bhunjun-Kassee, 2016).

The relevance of the TFA for anti-corruption is, however, apparent in Articles 1, 4, 7, 8 and 12 therein. The wide ranging requirements and comprehensive modernisation procedures set out in the TFA are relevant to corruption reduction as well as to increasing business efficiency. The responses in the survey acknowledge that procedures related to trade facilitation help to reduce bureaucracy, improve communications with the authorities, and address corruption in almost equal measure, which is perhaps reflective of the aims of trade facilitation measures and the position of anti-corruption in the TFA. The advantages of the SWS are depicted in figure 14 below, with benefits for business as well as government.

13 See OECD Integrity Forum opening remarks by Angel Gurría, Secretary General, OECD at <http://www.oecd.org/corruption/2016-oecd-integrity-forum-opening-remarks.htm>

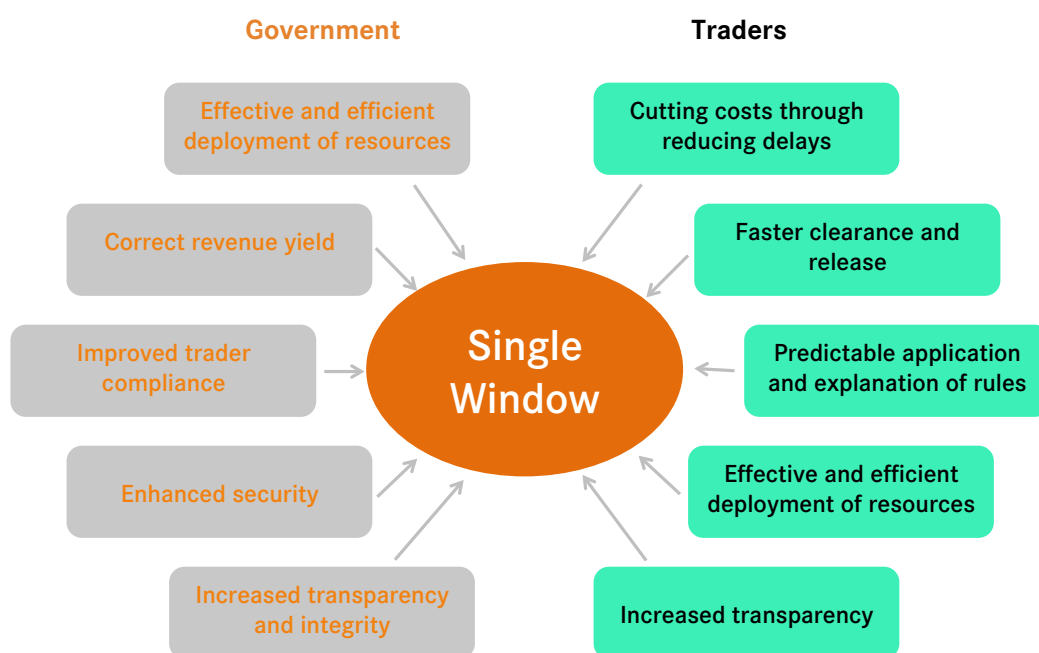


Figure 14 Advantages for Government and Business of a SWS, based on UNESCAP 2015.

Support for countries seeking to implement SWS is to be found in the UN’s Single Window Implementation Framework 2011, which lists the advantages as reducing the complexity, time, and costs involved in international trade and increasing the competitiveness of a national economy. Businesses may use SWS as a virtually sole authority, where data for the whole trade process is exchanged only once through the SW. The different authorities may then use the data for their own specific purposes.

The SWS Implementation Framework explains how to integrate data and business processes used by different stakeholders in different phases of the international supply chain. This may require changes to laws and regulations. In addition, because integration is made possible by automation, new information systems that are capable of

inter-operating with other information systems have to be developed.

Although these processes can be described in a couple of sentences, the reality of dealing with these challenges requires ‘strong political will, long-term commitment and support from top management, a reliable institutional platform for collaboration, effective management of stakeholders’ expectations and perceptions, workable business and architectural models, and necessary business and regulatory reforms,’ none of which can be assumed to be achieved quickly.

SWS implementation does however offer opportunities for the private sector to play a decisive role because it is a process that requires leadership, and it needs to be demand-driven. Stakeholders from different organisations, sectors of the economy and industries, and different countries who collaborate in pursuit of a common goal to implement a SW

will be well placed to shape its development.

Another reason for highlighting the complexities and challenges of implementing SWS is to illustrate that the process gives companies **a framework to understand and identify the state of readiness and implementation status of a country that is progressing towards SWS**. This information could serve companies willing to support the SWS process within a country and also provide **a structure for data collection as part of a corporate bribery risk assessment that can be applied across jurisdictions**. Country descriptions of how SWS has been tackled can also provide useful guidance for countries seeking to initiate the process, such as in Kenya (Mwajita, 2016). In terms of business and government savings, the example of South Korea shows what can be achieved. The Korea Customs Service estimates that the introduction of its SWS brought USD18million in benefits in 2010, part of the overall economic benefits that year of as much as USD3.47 billion from the agency's trade facilitation efforts.¹⁴

Addressing e-procurement through multi-stakeholder approaches

The risks of corruption in government procurement are frequently cited and e-solutions are helpful but gaps often remain. The potential for private sector initiatives to bridge those gaps is developing apace, such as with innovations in blockchain technology, software developments, and global platforms that share data and information. One such example is 'Source', a software tool that supports project preparation and aims to maximise the public sector users' financing options, including public private partnerships.

The Source software provides governments with a preparatory tool that enables all stakeholders to access all relevant information on an infrastructure project prior

to the bidding process. This information is gathered from the inception phase starting with the design, technical specifications, and investigations, all the way through to the procurement process. An online template standardises the information that is available to all stakeholders. This cooperation between multilateral development banks, the private sector, and governments has created an interesting support model for e-procurement processes. The tool may also help to improve trust in e-procurement by reducing interactions with public officials. It is reported that currently some 28 countries use Source, involving around 100 projects worth USD 21 billion.¹⁵

There are other examples of e-tools that support e-procurement platforms, including an example of an initiative within the EU. The Pan-European Public Procurement On-Line (PEPPOL) project was a pilot project funded jointly by the European Commission and the PEPPOL Consortium members in 2008. The aim was to simplify electronic procurement across borders by developing technology standards that could be implemented across all governments within Europe. The overall objective was to enable businesses to communicate electronically with any European government institution in the procurement process, increase efficiencies and reduce costs. According to the information on the website,¹⁶ PEPPOL has not replaced national e-procurement systems, but has built upon their existing strengths by using information and communication technologies to enable them to connect with each other. PEPPOL enables access to its standards-based IT transport infrastructure through Access Points and provides services for e-procurement with standardised electronic document formats.

The purpose of PEPPOL is to enable European businesses to easily deal electronically with any European public sector buyers in their procurement processes, thereby increasing opportunities for greater competition for government contracts and providing better value for taxpayers' money.

14 World Bank Doing Business website, reported 2011.

15 See www.public.sif-source.org

16 See <https://peppol.eu/?rel=undefined>.

The EU model might promote efficiencies, but whether it reduces corruption risks is another question. A review of this model, and its potential for other regional trading bodies might offer some insights.

Country studies

Country-specific or regional studies are extensive and continually growing in number. Empirical studies on e-procurement use country-specific examples or small samples of relatively homogenous cases (World Bank, 2016). In the 2016 World Bank paper's literature review, the authors cite specific instances of the reduction of corruption, such as in India, thanks to biometric registration, authorisation, and payments systems in connection with fuel subsidies. In a 2014 study involving a large field experiment, the researcher concluded that e-government reduces fiscal leakages but does not necessarily improve the outcomes of public programmes. The World Bank research reports only weak evidence of a reduction in petty corruption attributable to e-government adoption.

Below is a small selection of countries that appear to present good examples of e-governance.

Burkina Faso – Leaping forward through PPP in e-government

In many instances, countries that are currently piloting innovative digital technologies in combination with existing frameworks or nascent e-government strategies are those that face the greatest challenges in terms of addressing corruption. Countries on the African continent and in the Far East that are pioneering the implementation of these tools may take leaps forward when it comes to combating corruption. One such example is Burkina Faso where eBurkina is an ambitious government led project that aims to foster the development of a digital platform where all agencies can collect, store, use and share data, not only within the

government but with the whole population. The National Agency of ICT promotion established in 2014 in charge of digital development is managing the project.¹⁷ More generally the hope is that by teaming up in public-private partnerships with entrepreneurs that operate in Silicon Valley, Europe, and elsewhere, substantial leaps forward to reduce corruption through innovative combinations of technology may become a reality.

Estonia - Comprehensive e-government as a way of life

For the last twenty years or so, Estonia has continually developed its approach to e-government and integrated it into everyday life for all its citizens.¹⁸ One of the key elements of e-Estonia is that its databases are decentralised, which, according to the government website, means:

- There is no single owner or controller
- Every government agency or business can choose the product that is right for them
- Services can be added one at a time, as they are ready

X-Road is the all-important connection between these databases, the tool that allows them to work together for maximum impact. All of the Estonian e-solutions that use multiple databases use X-Road. All outgoing data from X-Road is digitally signed and encrypted. All incoming data is authenticated and logged. Originally, X-Road was a system used for making queries to the different databases. Now, it has developed into a tool that can also write to multiple databases, transmit large data sets, and perform searches across several databases.

¹⁷ See <http://blogs.worldbank.org/ic4d/burkina-faso-s-digital-ambition-transforming-through-egovernment-and-digital-platforms>

¹⁸ See <https://e-estonia.com/component/x-road/>

Online Procedures Enhancement for Civil Applications (OPEN) Initiative

In 1998, the city of Seoul's mayor initiated an anti-corruption programme, the Online Procedures Enhancement for Civil Applications (OPEN) initiative, which opened up governmental procedures (e.g. applications for licences to open a restaurant, building permits, inspections etc) to the public. OPEN is regarded as a model for how e-government can reduce graft and corruption. It allows applicants to monitor in real time the progress of their application. Strong leadership was crucial to its success, according to one study (Seo, 2009).

The OPEN web portal allows the applicant to raise questions in the event any irregularities are detected. The OPEN initiative focused on the simplification of regulations and procedures, re-engineering of work practices, transparency in procedures, effective communication with the citizens, and training, rather than the technology as a tool to achieve the goal. OPEN has reportedly contributed to a notable decrease in corruption levels and has significantly enhanced the credibility of municipal bodies amongst citizens.

Korea ON-Line E-Procurement System (KONEPS) – SWS

In 1997, the Korean government began reforming its notoriously complicated, non-transparent, corrupt public procurement system, introducing e-procurement to exploit the country's well-developed information and communications infrastructure. E-procurement has generated numerous benefits, including enhanced transparency and public trust, by reducing contacts between officials and suppliers and by sharing information between government agencies and the public. The Korea ON-line E-Procurement System, or KONEPS, is a nationwide, web-based Single Window System that provides all information and services needed for public procurement. According to a report by the WEF, KONEPS has saved the public sector US\$1.4 billion in costs and the private sector \$6.6 billion, compared with the previous paper-based system. The time it took to process the bids

dropped from an average of 30 hours to just two.¹⁹ The interest in KONEPS has been reported in connection with various countries, and in January 2017 it was announced that Vietnam is planning to implement its version of KONEPS with South Korean assistance.

Anti-Corruption Clean Construction System

The Seoul Metropolitan Infrastructure Headquarters in partnership with the private sector launched the Anti-Corruption Clean Construction System in 2011. It is an Internet-based payment and information system aimed at curing the problem of subcontracted workers in construction projects receiving late or no payment. To this end, Seoul separated the payments for prime and subcontractors and set up the One-Project Manager Information System (One-PMIS), a digital platform on which all stakeholders can monitor a project in real time and verify whether a payment actually reached a subcontractor. For the wider public, the city administration established a website that provides citizens with all the necessary information on projects in the city, including pictures of sites and a real-time video feed.

As well as increasing the efficiency of the administrative aspects of construction projects by 30%, this system has created next-to-total transparency and raised the user satisfaction of subcontractors, businesses, and government bodies. In 2012, the tool was praised at the Global e-Government Forum for fighting corruption.²⁰ A key requirement in the success of such systems is the availability of Internet coverage. This makes the tool at once open to anyone with access to the web and closes it to those without. For South Korea, this is less of a problem

19 <https://www.weforum.org/agenda/2016/01/4-reasons-why-businesses-should-be-more-open/>

20 'Anti-Corruption Clean Construction System.' Anti-Corruption Clean Construction System - OPSI. OECD, n.d. Web. 15 Nov. 2016. <https://www.oecd.org/governance/observatory-public-sector-innovation/innovations/page/anti-corruptioncleanconstructionssystem.htm>

as it is home to the world's fastest Internet connections,²¹ accessible to over 92% of the population.²²

Chile – E-procurement streamlined in a one-stop-shop

In 1998, the government of Chile formed the Communications and Information Technology Unit (UTIC) with the mandate of coordinating, promoting, and advising the Chilean Government on the development of IT in the areas of employment, information and communications. One area of reform in which the UTIC was particularly successful was in pushing forward a comprehensive reform of its procurement system.

The UTIC completely revamped the underlying system of procurement by centralising all purchasing activities through a single website. This website automatically sends emails to private companies registered on the system when contracts come up for bidding and takes bids online. Not only has the new system streamlined procurement, it has also created new methods of oversight and accountability. For example, the site includes statistics and other information on past performance of government contractors.

ChileCompra is the institution that manages Chile's state procurement system, MercadoPúblico, and hosts a digital platform that acts as a one-stop-shop access to all public procurement opportunities. Created in 2003, the tool responded to the needs of the changing market by making procurement more efficient and accessible, especially to

SMEs. Since its implementation, the procurement shares held by SMEs have risen by 20%²³, and procurement in general now exceeds 3.5% of Chile's GDP. In recent years, ChileCompra has been focusing on the development of public policies in an effort to promote inclusion and transparency. The ChileCompra Observatory was created, which sets higher probity and good practices goals and monitors signs of corruption in the processes carried out by public bodies.²⁴ Prior to the establishment of portals to conduct government transactions online, the government procurement system in Chile was fragmented and burdened with various, sometimes contradictory, regulatory frameworks (Basu, 2004).

Guatemala – Mandatory e-customs makes a difference

In February 2014, Guatemala launched the 'Customs without Paper' programme to promote the electronic submission of customs documents through a web portal and to eliminate the submission of hard-copies. Online submission of customs declarations has been compulsory since January 2015. The programme was rolled out gradually. It started at the Puerto Barrios customs office in March 2014 and was implemented in all customs offices by July 2015. Although the system for electronic document submission has been available since 2006, its use was not compulsory and few traders used it in practice. With the compulsory electronic submission system, import declarations and supporting documents are submitted only in electronic format, customs clearance has as a consequence become faster.

The example of Guatemala illustrates that it is possible to

21 McDonald, Mark. 'Home Internet May Get Even Faster in South Korea.' New York Times. The New York Times Company, 21 Feb. 2011. Web. 22 Dec. 2016. http://www.nytimes.com/2011/02/22/technology/22iht-broadband22.html?_r=0.

22 Miniwatts Marketing Group. 'World Internet Users Statistics and 2016 World Population Stats.' Internet World Stats. N.p., 2016. Web. 22 Dec. 2016. <http://www.Internetworldstats.com/stats.htm>

23 Doing Business 2017: Equal Opportunity for All: Comparing Business Regulation for Domestic Firms in 190 Economies. Washington, DC: World Bank, 2016. Print. <http://www.doingbusiness.org/~ /media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB17-Full-Report.pdf>.

24 See <http://www.compraschile.cl> (in Spanish) Case study: http://www1.worldbank.org/publicsector/egov/eprocurement_chile.htm.

make substantive progress in a relatively short space of time, even from a challenging starting point. The country had experienced an extended civil war, and a massive corruption scandal that engulfed the government rooted in the customs office. Trust and efficiency in the government needed to be restored, with different stakeholders, especially the private sector, sharing the vision and being part of these efforts. As a result, the Guatemalan customs have engaged with the private sector in Collective Action to support the 'Customs without Paper' initiative, which is essential if the new systems are to succeed, even if the processes are obligatory for traders.

Singapore Customs – Long-standing example of an SWS

TradeNet is Singapore's electronic data interchange system that links traders, hauliers, shipping lines, freight forwarders, airlines and handling agents with government agencies including Singapore Customs, and the air and sea port authorities (altogether some 35 different units are integrated into TradeNet). It functions as an electronic clearing house for trading papers to be processed and approved by the relevant government agencies. The system reduces permit processing time to less than one minute (prior to the system this was between 2-7 days). The cost is around SG\$5, reduced from SG\$10-20, and the capacity to process documents was increased from 10,000 to around 300,000 per day. As it has been in operation since 1989, TradeNet provides a longstanding example that has helped to put Singapore in the top rankings of the World Bank's Ease of Doing Business register for many years.

GOV.UK – Open source code for all governments to use

In the 2016 UN E-Government and E-Participation surveys, the UK government ranked at the top as one of the most

digitally advanced governments in the world. The code for the platform 'GOV.UK' is now open and is used as a model by governments worldwide. The Government Digital Service (GDS) has led the digital transformation of the UK government and likewise serves as a model. The GDS is part of the Cabinet Office, and its objectives include helping to bring government departments together and meet user needs. The development of the UK's strategy overall and all the services on offer are clearly set out in the [joinup.eu](#) newsletter. For the private sector, the Government Gateway portal provides business and self-employed persons the opportunity to register to access all the e-government tools and services. The comprehensive range of e-government tools for the private sector are easy to find and are intuitive to use, whether it's registering a company or exporting live fish.

The UK's approach to e-government and the range of services on offer to the private sector provide a model not only for public administrations but also for businesses to use as a benchmark against which to assess their experiences of e-government tools in other countries. Such a benchmark could provide a starting point for comparison and support consistency across jurisdictions.

EU - Digital trademarks in the single market

The European Commission Office for Harmonisation in the Internal Market (OHIM) is an example of how e-government can be used to break through silos and improve institutional coordination. Through the development of public services related to the Community Trademark, as well as networked relationships with national trademark offices, this programme gave rise to an integrated yet federated trademark system in Europe.

OHIM's portfolio of digital information, systems and tools indeed very much influenced OHIM's institutional set-up and coordination. Digitisation had powerful effects

on communication and coordination by creating shared technical standards, data and communication channels, as well as a drive towards interoperability. New tools and systems gave rise to continued streamlining of work processes in the back office, breaking up silos and creating better integration within OHIM.

This new digitisation also helped strengthen connections to the network of national trademark offices in Europe. For example, the Trade Mark View tool was an important means of deepening harmonisation through shared resources and information. The tool focuses on developing and supporting a ‘common trade mark search engine tool’. Overall, the new digitisation tools and systems helped further OHIM’s mandate to move beyond mere coexistence with national offices to greater interoperability across the entire network of national trademark and design offices in Europe. (Fountain 2011).

The Digital 5 – Learning through exchanging experiences

The Digital 5, or D5, is a network of leading digital governments with the goal of strengthening the digital economy. The founding and current members of the group are the United Kingdom, South Korea, Estonia, Israel, and New Zealand. The D5 share experiences in developing e-government, not only to relate successes but also to learn from mistakes. They meet regularly to address specific themes, and the member countries regularly blog about their deliberations. Interestingly, three of the D5 countries are relatively small and have made rapid progress in their digital strategies. In looking for ‘models’, any of these countries would serve to provide a strong example, as would many EU countries. For information on the EU, the www.joinup.eu website contains up-to-date information on some 34 countries (including the EU, FYROM, Iceland, Liechtenstein, Switzerland, and Turkey) and sets out the current state of e-government development in newsletters that summarise the history and current status of country strategies and

legislation. Specifically for the private sector, the business information chapters identify the e-government tools and portals that are currently operating and what they cover.

Commentary

There are a great many country studies that are descriptive of the status of e-government in a particular jurisdiction or region, and they tend to tell positive stories which may be connected to the author’s connections or affiliations. Where country studies examine effectiveness, it is often from the citizens’ perspective, and whilst the findings may also hold for the private sector, this will not be true in all cases. On the other hand, literature that describes the citizen experience in relation to e-government may provide helpful insights that companies can use in their risk assessments, customer surveys, and marketing strategies.

6. Conclusion, next steps and further research

Academic and empirical research on the role of the private sector and its incentives to use e-government is relatively scarce. More informed analysis from firms' perspectives on the effectiveness of the range of e-government tools, such as in e-customs and e-procurement, would contribute to improvements in their design, implementation and acceptance by the private sector.

The Basel Institute's E-Government Survey and associated interviews indicate that internationally active companies are quite familiar with e-government applications. Many companies encourage – or even oblige – the use of e-government tools by their businesses and subsidiaries. However, knowledge within companies regarding their use does not appear to be widely shared beyond the function that is responsible for using the tools. Detailed knowledge about their strengths and weaknesses is often confined within business silos or, for example, in a subsidiary in a high-risk country.

Research has identified risks in certain e-government processes. Companies should therefore seek to identify any shortcomings that indicate bribery risks in the e-tools they are using and to do so in the context of the country where it is being used. In defining that context, the current status of the e-development of a country should be taken into account. This should include whether a 'whole-of-government' approach to the country's e-government strategy has been published, adopted, and is being implemented within a stated timeframe. This holistic picture is important because e-government in itself will not solve corruption; accompanying reforms and political will are essential.

Failing to assess e-government tools from a bribery risk perspective may mean that such assessments do not fully reflect the potential impact of e-government on the company's business. The bribery risks associated with entering a new market should also include an assessment of the availability and quality of government e-tools from a corruption prevention/reduction perspective.

Companies that actively track and review the development of e-government portals and open data to strengthen their corruption risk prevention strategy, may also derive advantages for their own operations. These new tools and information sources, for example, may allow companies to obtain information and assess risks of entering new markets or expanding existing business without necessarily having to engage third parties to obtain this information on their behalf. The risks associated with such business consultants operating in high-risk jurisdictions can be reduced simply by directly accessing open data and informational services that are available online to companies. Law enforcement investigating corporate corruption will scrutinise the use of third parties and whether there is a reasonable business justification for hiring such persons.

Companies should also engage in government consultations on e-government strategy when given the opportunity. Businesses need to make their requirements known to government because it is business that leads digital innovation, not government. To date, the focus of academic and empirical research has primarily been on the satisfaction of citizens, and this has been the defining criterion for measuring the success of e-government. This needs to be supplemented by a more active and proactive private-sector-driven assessment of e-government.

From a country perspective, the exploitation of cutting-edge digital developments in combination with e-government tools may provide opportunities for some to leap forward in curbing corruption, and for others, to transform the risk landscape. The private sector should support these developments because the benefits will be for all elements in society – business as well as citizens.

The relationship between e-government and corruption has been described in a wide range of studies using datasets developed by the UN, the World Bank, and others, as well as reviews of other literature and approaches from multiple academic disciplines. Findings are generally consistent that e-government has the potential to reduce corruption, although e-government does not in itself guarantee the

demise of corruption. There are limitations in the scope and quality of some of the literature, and cross-national research that is specifically relevant to the private sector is relatively scarce. The literature review in this paper is not exhaustive, and there are ample areas where more research would benefit stakeholders in e-government, including the private sector. We hope that some of the points raised here open up avenues for further examination.

The Basel Institute's E-Government Survey and research for this report give rise to a number of recommendations aimed at the private sector and government, as well as particular areas for further research. They promote a collaborative and coordinated approach to improving e-government solutions with the aim to improving their effectiveness in the fight against corruption. Additional commentary is provided with respect to certain recommendations below. The survey and report are by no means definitive on the subject of e-government, and if this paper prompts further research and debate, it will have achieved one of its aims.

Recommendations for the private sector:

- *Integrate the requirement to identify e-government tools that may reduce the risk of bribery in corporate anti-corruption compliance policies and use them where appropriate.*

Employees often have limited knowledge about the availability and relevance to their businesses of e-government tools. Compliance functions (particularly at global headquarters) are often unaware of the extent to which e-government tools are currently being used throughout their companies both in terms of which locations, and which company operations are using them. The results of the Basel Institute's E-Government Survey indicate that there is room for companies to improve their awareness of the particular role that e-government tools can play in their corruption-prevention efforts independently from general improvements in business efficiencies. Companies that operate transnationally should actively make their

employees aware of e-government tools in various jurisdictions and encourage their use where available as part of their anti-corruption compliance efforts.

- *Assess a country's whole-of-government strategy towards e-government tools as part of anti-corruption risk assessments and due diligence on business partners, joint ventures & M&A transactions.*

E-government tools can mitigate bribery solicitation risks arising from interactions with government officials. The existence and quality of the whole-of-government e-government strategy, its maturity and implementation status should be included as part of country corruption risk assessments. Such assessments should be routinely carried out with respect to business processes, as well as in the context of due diligence related to business partners, joint ventures and mergers and acquisitions. Companies should consider how to weight e-government tools in the context of their assessment of a country's e-government strategy and anti-corruption efforts. Where possible, companies should consider the quality of e-government functionality, as well as online information relevant to entering a new market, e-government procedures and authorisations. Understanding the full context of a country's anti-corruption strategy in relation to its e-government tools can help a company to determine whether to use the e-tools where this is optional.

- *Assess whether third parties who are engaged in government relations or retained to collect market data are really needed if open government data or an e-government tool is available.*

The employment of third parties is increasingly in the spotlight when it comes to bribery investigations. Reducing the use of third parties acting on behalf of the company towards government departments can reduce bribery risks. E-government tools can obviate the need for brokers or agents in some countries. Open data and transparency portals that can be accessed remotely reduce the need for third-party business consultants that

offer data on new markets. Companies should therefore require that the business has checked and exhausted transparency portals or similar services before they are permitted to retain a consultant to gather market data.

- *Review periodically the effectiveness of e-government tools in business processes and in anti-corruption efforts; share such data internally, externally, and across jurisdictions.*

By sharing their knowledge, companies contribute to raising the overall level of awareness on e-government, how it is to be effectively designed and implemented, and how it can support curbing corruption and fighting bribery. This indirectly leads to a more conducive environment for business

- *Actively engage in public-private partnerships and government consultation processes.*

Public-private partnerships to develop e-government tools provide opportunities for the private sector to contribute. They may also provide a route for dialogue and closer alignment with business requirements. Where government consultation processes exist, the private sector should engage when given the opportunity. These offer rare opportunities to impact policies and advocate private sector positions. Actively participating in these processes signals commitment and expectations to the government on policy areas key to companies, including anti-corruption and anti-bribery. Data from companies that assesses the effectiveness of e-government tools could serve to inform government consultation processes in countries where the private sector perspective is solicited in connection with a proposed development of an e-government tool or strategy. At the same time, the private sector should ensure it keeps up to date regarding e-government developments in countries where they operate or plan to operate and conduct business.

- *Participate in secondments between the public and private sector to develop capacity in the public sector and*

to foster mutual understanding of the issues and increase knowledge transfer when it comes to e-government.

In some instances, secondments might be a more effective way than public-private partnerships and participation in consultation processes for government and the private sector to learn from each other with the view to improving e-government solutions aimed towards corruption prevention, though care should be taken to avoid conflicts of interests.

Recommendations for governments:

First and foremost, governments should nurture a collaborative ecosystem and serve as a connector, facilitator and matchmaker without attempting to dominate. This is a complex challenge, considering that most governments have committed to internationally agreed targets that require domestic implementation. Particular recommendations for governments to improve collaborative processes in developing e-government solutions are as follows:

- *For States Parties to the UN Convention against Corruption, deliver on obligations related to expanding e-government mechanisms and share their best practices on technological innovations and electronic services to public service delivery.*
- *Treat the private sector as a resource, partner and consumer with needs and wants when it comes to e-government. A government strategy to engage actively with business is called for when seeking to develop e-government reform.*

Fostering dialogue at all stages of e-government development with the private sector may increase acceptance levels where e-government tools are optional. In this consultative process, stakeholders may realise that they have comparable interests in developing e-government and share similar obstacles. The design and development of countries' whole-of-government e-government strategies would benefit from

private sector support and input, especially when the use of these tools is (or will be) compulsory or when the private sector is likely to be the primary user. Companies should take the opportunity to make their digital requirements, concerns, and experiences of e-tools known to governments, either through consultation processes or via public-private partnerships. This will ensure that e-government is user-friendly and that priorities are set in consultation with the private sector.

- *Enlist the support and expertise of the private sector to help overcome technical challenges; governments could thereby improve the development and delivery of e-government strategy.*

This would benefit all stakeholders and speed up e-government implementation. The domestic digital divide influences e-government effectiveness. Citizen and business access to IT and telecommunications infrastructure will determine the capacity for take-up and usage of e-government.

- *Consider the introduction of end-to-end processes including full payment transaction services and making the use of e-government tools obligatory from the outset to increase their effectiveness and reduce bribery.*
- *Promote public sector staff secondments to the private sector and vice versa.*

Secondments could improve mutual understanding of the issues and increase knowledge transfer as well as corporate perspectives when it comes to e-government. A well-educated public sector workforce impacts the effectiveness of e-government. It is clear that e-government that simply replaces humans with online systems is likely to fail. A capable public sector workforce is needed to implement and operate e-government tools, as well as to encourage participation by all sectors in these evolutions. This may therefore have an impact on long-term workforce planning, professional development for public servants, and broader civil

service reform, as well as on educational curriculums.

Recommendations for further research in the following areas:

- *Examining the role and contribution of the private sector in e-government to ascertain the effectiveness and current acceptance of e-tools in preventing corruption. Such research could also shed light on the incentives for private sector engagement in using e-government tools.*
- *Comparing the advantages and challenges of adopting e-government solutions to mitigate bribery risks versus a 'big bang' approach to curbing corruption.*
- *Developing a database that maps the optional and obligatory e-government tools for all countries for companies.*

The aim would be to enable the private sector to take account of the status of e-government more systematically. As a reference database it could support market risk analyses to help companies considering whether to enter a country, as well as enabling companies to keep up to date with e-developments in a specific location. This global register could integrate proposal 1 above such that an integrated rating system for businesses to report their own experiences with such tools could ensure that such a database is not only a repository of information but also an interactive assessment tool that will highlight the most useful e-tools. For e-government tools that are obligatory, the rating system could help to contribute to better understanding as to why they are effective (or not), and all from a business perspective.

- *Creating a web-based application using algorithms to rate user satisfaction of e-government by companies (and others) that would help to broaden understanding and knowledge of successful and weak e-tools.*

This could be modelled on similar applications that are based on end-user satisfaction rating systems.

The aim would be to provide a format for users to rate and comment on their experience of e-government so that tools and systems that function well are highlighted, and those that are weak are exposed accordingly. The aim would be to improve the provision of e-government services and to enable learning for all stakeholders, as well as for public-private partnerships to address areas that would benefit from such arrangements.

- *Convening multi-stakeholder conferences bringing together public and private sectors engaged in e-government, software developers, end-users, academia, and civil society to brainstorm the best approaches for e-government and its implications for anti-corruption that could produce insights into this rapidly evolving subject.*

This could form the basis for an examination of the Fourth Industrial Revolution and Anti-Corruption Collective Action: In light of the increasing need for **multi-stakeholder engagement in the design and development of e-government** and the opportunities afforded by digital innovations such as blockchain, there is much to be done in terms of catalysing research and practical approaches to improve the provision of e-government.

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Useful Links

UK: <https://www.gov.uk/>

Australia: <http://www.australia.gov.au/>

Hong Kong: <http://www.gov.hk/en/residents/>

New Zealand: <https://www.govt.nz/>

Singapore: <http://www.ecitizen.gov.sg/Pages/default.aspx>

Norway: <http://www.norge.no/en/>

US: <http://www.usa.gov/>

Annex 1

Embedding e-government solutions into an anti-corruption compliance programme

Here is an example from a company (GSK) that has included an obligation in its anti-corruption compliance policy to reduce interactions with public officials through e-government solutions.

As a way of reducing the risk of solicitation, GSK requires all country managers to encourage their business to use any available schemes or systems that reduce face-to-face contact, particularly when interacting with government officials or making financial transactions, even when this involves payment of a legitimate and fair subscription fee. This may include:

- E-invoicing.
- E-filing of taxes, contributions, licensing.
- E-procurement, e-tendering, e-sourcing.
- Electronic platforms for interactions with the judiciary, tax and trade and customs authorities (eg paperless trading or single window schemes), regulatory agencies, health ministries or secretaries, local services, connecting and managing utilities, etc.
- Trade facilitation schemes such as authorised operator, expedite shipments, pre-arrival processing, etc.

This requirement is included in the section on prevention of solicitation of GSK's Anti-Bribery and Corruption Standard.

Annex 2

Evolving definitions of e-government

Sources	Definition
2001 Benchmarking E-government A Global Perspective (UNDESA, 2001)	E-government is a 'tool for information and service provision to citizens.'
2003 World Public Sector Report E-Government at the Crossroads (UNDESA, 2003)	E-government is what enhances the capacity of public administration through the use of ICT to increase the supply of public value (i.e. to deliver the things that people want).
United Nations Global E-Government Readiness Report 2005: From E-Government to E-Inclusion (UNDESA, 2004)	E-government is what enhances the capacity of public administration through the use of ICT to increase the supply of public value (i.e. to deliver the things that people want).
United Nations Global E-Government Readiness Report 2005: From E-government to E-inclusion (UNDESA, 2005)	The definition of e-government needs to be enhanced from simply 'government-to-government networking' or 'use of ICT by governments to provide information and services to the public' to one which encompasses the role of the government in promoting equality and social inclusion.
United Nations E-Government Survey 2008: From E-Government to Connected Governance (UNDESA, 2008)	E-government in the continuous innovation in the delivery of services, public participation and governance through the transformation of external and internal relationships by the use of information technology, especially the Internet.
UN E-Government Survey 2014: E-Government for the Future We Want (UNDESA, 2014)	E-government can be referred to as the use and application of information technologies in public administration to streamline and integrate workflows and processes to effectively manage data and information. Enhance public service delivery, as well as expand communication channels for engagement and empowerment of people.
Organisation for Economic Co-operation and Development (OECD)	E-government is defined as 'the use of information and communications technologies (ICT), and particularly the Internet, to achieve better government.'

Sources	Definition
World Bank (WB, 2015)	E-government refers to government agencies' use of information technologies (such as Wide Area Networks, the Internet and mobile computing) 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.

Source: UN E-Government Survey 2016

Annex 3

Basel Institute Survey Questions

1. Please identify which country you will base your answers on (Answered in drop down list)
2. What industry sector(s) is your company in? (Answered drop down list)
3. Does your company encourage the use of e-tools/solutions for interacting/transacting with the government? (Answered as Yes or No)
4. How does your company encourage the use of these tools?
 - ◇ Through informal communications to staff
 - ◇ Through formal communications to staff
 - ◇ Through formal corporate policies
 - ◇ Through formal corporate anti-corruption policies
 - ◇ Other
5. Does your company specifically encourage the use of these e-tools/solutions because they:
 - ◇ Reduce human error
 - ◇ Reduce the cost of transacting with the government
 - ◇ Reduce the risk of a demand for a bribe
 - ◇ Reduce the time it takes to complete an interaction or transaction
 - ◇ Other
6. Does your company use an e-filing of taxes/e-taxes solution/tool? (i.e. government provided online portal to submit corporate tax filing) (Answered as Yes or No)
7. Has your company benefited from using e-filing of taxes/e-taxes solutions/tools?
 - ◇ No benefit
 - ◇ Cost reduction
 - ◇ Less bureaucracy
 - ◇ Improved communication with authorities
 - ◇ Increase in business
 - ◇ Increase in profit
 - ◇ Reduction of corruption
 - ◇ Other
8. Does your company use e-tools for company registration purposes?
 - ◇ No benefit
 - ◇ Cost reduction
 - ◇ Less bureaucracy
 - ◇ Improved communication with authorities
 - ◇ Increase in business
 - ◇ Increase in profit
 - ◇ Reduction of corruption
 - ◇ Other
9. Does your company use an e-procurement solution/tool? (i.e. business-to-government purchase and sale of supplies, work, and services through the Internet or other information and networking systems) (Answered as Yes or No)
10. Has your company benefited from using e-procurement solutions/tools?
 - ◇ No benefit
 - ◇ Cost reduction
 - ◇ Less bureaucracy
 - ◇ Improved communication with authorities
 - ◇ Increase in business
 - ◇ Increase in profit
 - ◇ Reduction of corruption
 - ◇ Other

11. Does your company use an e-sourcing solution/tool? (i.e. the process of a government obtaining bids from different suppliers via a single online portal) (Answered as Yes or No)
- ◇ Reduction of corruption
 - ◇ Other
12. Has your company benefited from using e-sourcing solutions/tools?
- ◇ No benefit
 - ◇ Cost reduction
 - ◇ Less bureaucracy
 - ◇ Improved communication with authorities
 - ◇ Increase in business
 - ◇ Increase in profit
 - ◇ Reduction of corruption
 - ◇ Other
13. Does your company use e-platforms to communicate with government authorities?
- ◇ No benefit
 - ◇ Cost reduction
 - ◇ Less bureaucracy
 - ◇ Improved communication with authorities
 - ◇ Increase in business
 - ◇ Increase in profit
 - ◇ Reduction of corruption
 - ◇ Other
14. Does your company use an e-customs solution/tool? (i.e. web based customs clearance processes) (Answered as Yes or No)
15. Has your company benefited from using e-customs solutions/tools?
- ◇ No benefit
 - ◇ Cost reduction
 - ◇ Less bureaucracy
 - ◇ Improved communication with authorities
 - ◇ Increase in business
 - ◇ Increase in profit
16. Does your company use an e-residency (corporate) solution/tool? (Answered as Yes or No)
17. Has your company benefited from using e-residency (corporate) solutions/tools?
- ◇ No benefit
 - ◇ Cost reduction
 - ◇ Less bureaucracy
 - ◇ Improved communication with authorities
 - ◇ Increase in business
 - ◇ Increase in profit
 - ◇ Reduction of corruption
 - ◇ Other
18. Does your company use trade facilitation schemes (such as: authorised operator, expedite shipments, pre-arrival processing, etc.)? (Answered as Yes or No)
19. Has your company benefited from using trade facilitation schemes (such as: authorised operator, expedite shipments, pre-arrival processing, etc.)?
- ◇ No benefit
 - ◇ Cost reduction
 - ◇ Less bureaucracy
 - ◇ Improved communication with authorities
 - ◇ Increase in business
 - ◇ Increase in profit
 - ◇ Reduction of corruption
 - ◇ Other
20. Are there any other e-tools/solutions in your market that you are aware of? Please specify. (Answered in free text)
21. Does your company take into account the availability of specific e-tools/solutions that reduce the face-to face interaction with governments when deciding whether

or not to expand into a new market?

- ◇ Yes, to a large extent
- ◇ Yes, to some extent
- ◇ No
- ◇ I don't know

22. What are the reasons for not using government e-tools/solutions?

- ◇ They increase the cost of the transactions
- ◇ They do not reduce the time it takes to complete the interaction or transaction
- ◇ They do not reduce the exposure to bribery or corruption
- ◇ The e-tools/solutions made available by the government do not work appropriately
- ◇ Other

23. Have you come across a government e-tool/solution that might in your view enable bribery? Please specify if so. (Answered in free text)

24. Are there any transactions with governments where you think e-tool/solutions would be particularly helpful in reducing corruption, but currently do not appear to exist? (Answered as Yes or No followed by free text)

25. Add any other comment related to your experience using, or deciding not to use, government e-tools/solutions. (Answered in free text)

- ◇ Reduce human error
- ◇ Reduce the cost of transacting with the government
- ◇ Reduce the risk of a demand for a bribe
- ◇ Reduce the time it takes to complete an interaction or transaction
- ◇ Other

Basel Institute on Governance

The Basel Institute on Governance (www.baselgovernance.org) is an independent not-for-profit competence centre working around the world with the public and private sectors to counter corruption and other financial crimes and to improve the quality of governance. The Institute's areas of work comprise (i) recovering stolen assets through strategic case advice, technical assistance, and capacity building, and participating in international policy dialogue on standard setting in asset recovery; (ii) public governance, offering technical assistance to governments of developing and transition countries in their efforts to prevent corruption and strengthen the quality of their governance systems; and (iii) corporate governance, compliance, and anti-corruption Collective Action.

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Working papers

In this working paper series the Basel Institute on Governance publishes reports by staff members and invited international experts, covering critical issues of governance theory and practice. For a list of publications, please visit www.baselgovernance.org.



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Abstract

Does e-government have an impact in reducing corruption? Do e-government solutions sufficiently take private sector perspectives into account to maximize its potential for addressing corruption risks?

This paper addresses these and additional questions about the dynamic between governments and the private sector with respect to harnessing e-governance tools for corruption prevention. It is written primarily from a private sector perspective and for private sector actors who are interested in a more comprehensive understanding of the scope and examples of e-government solutions to improve their anti-corruption policies, but concludes with numerous recommendations for the private sector and governments alike.