

Hacking corruption in the digital era: How tech is shaping the future of integrity in times of crisis

AGENDA FOR
BUSINESS INTEGRITY
MAY 2020



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This paper has been written by the World Economic Forum's Global Future Council on Transparency and Anti-Corruption 2019-2020. The findings, interpretations and conclusions expressed herein are a result of a collaborative process facilitated and endorsed by the World Economic Forum, but whose results do not necessarily represent the views of the World Economic Forum, nor the entirety of its Members, Partners or other stakeholders, nor the individual Global Future Council members listed as contributors, or their organizations.

This paper is part of the [Agenda for Business Integrity](#) and focuses on the pillar 3: leverage technologies to reduce the scope of corruption.

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1

Tech for integrity in times of crisis

1.1 Tech is the most promising driver of integrity.

Data-driven, tech-based anti-corruption solutions are rapidly expanding in sophistication and potential. The transparency they enable is critical for anchoring confidence in business and restoring trust in government. Tech innovations, powered by data and behavioural insight, are disrupting corruption risks and boosting integrity systems. They are accelerating

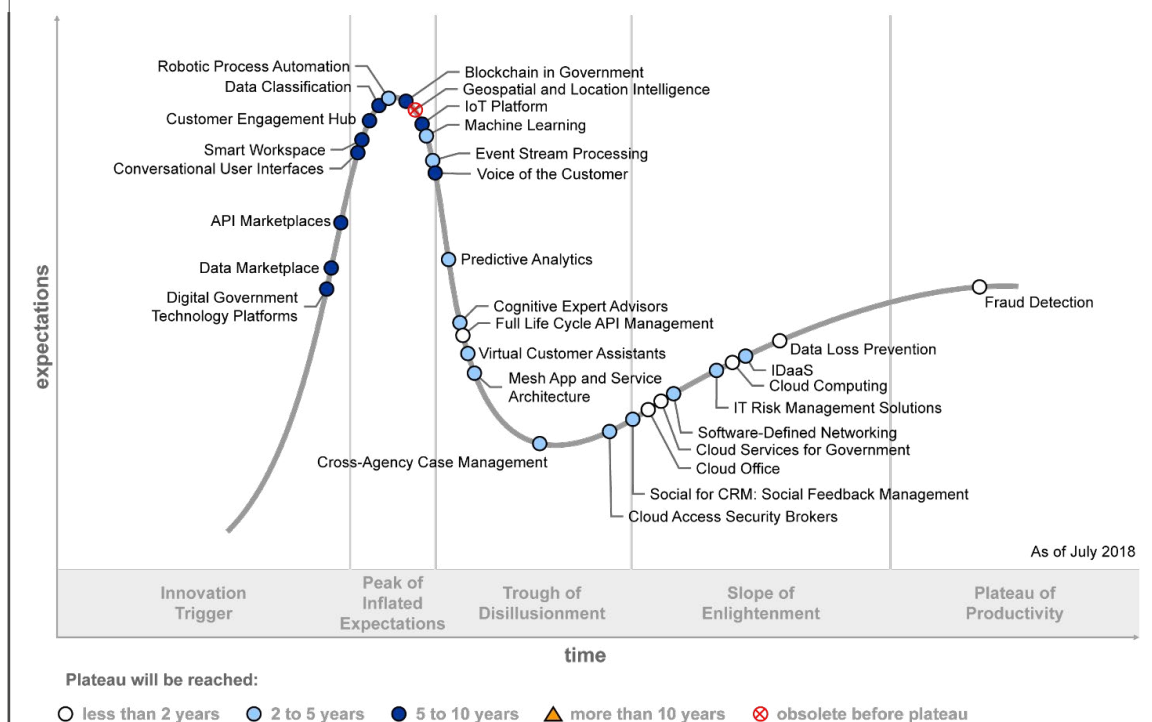
new forms of accountability based on the smarter exploitation of big data and fostering new public-private partnerships for integrity. In the digital era, data has become a critical asset for integrity actors to detect and deter fraud risks, complex networks and corrupt practices.

1.2 Integrity analytics powered by ever-expanding data are a corruption game-changer.

With the Panamá and Paradise papers, advanced analytics and artificial intelligence (AI) are becoming critical anti-corruption levers. The insight they generate can be used to better detect, reveal and deter corruption. They can raise red flags and early warnings in high-risk transactions and suspicious financial flows in seconds by cross-referencing public databases

and big data. At the same time, predictive analytics can pinpoint vulnerabilities and pre-empt risks. When combined with insight from behavioural science (World Bank 2018),² they help devise more targeted buffers against fraud. According to Gartner, data analytics is reaching its “slope of enlightenment”.

FIGURE 1 Hype Cycle for Digital Government Technology, 2019



Source: Gartner (2019)

1.3 The COVID-19 pandemic increases corruption risks.

Corruption thrives in times of tragedy. Pandemic outbreaks and natural disasters are fertile ground for fraud. To fight the COVID-19 pandemic, governments need to act urgently to save lives in the midst of the worst pandemic in a century. In the short term, containment of the pandemic and management of the health crisis require emergency powers to procure medical supplies swiftly to save lives, suspending standard procurement rules. In the medium term,

the emergency programmes and recovery packages governments are developing with the backing of the International Monetary Fund (IMF) and multilateral development banks to respond to the economic and social consequences of the health crisis will involve deploying vast amounts of resources in a very short time to protect the vulnerable, shield small businesses and revive the economy.

1.4 In emergencies, transparency saves lives.

Health emergencies and natural disasters are particularly vulnerable to corruption and governments' emergency responses often incubate opportunities for fraud. These risks need to be recognized and addressed. There are two main risks factors: those related to the immediate response to the health

crisis (emergency response) and those related to governments' response to its economic consequences (recovery response), deactivating much-needed safeguards and checks and balances.³ Emergency procurement is particularly exposed.

1.5 To confront the COVID-19 pandemic, technology is the best prescription against corruption.

Tech-powered and data-based anti-corruption solutions are critical to strengthening the safeguards necessary to mitigate the corruption risks inherent to emergency response. Open data is not only especially important in the procurement of emergency medical

supplies during the outbreak, but also as part of governments' economic response and stimulus programmes to counter the economic impact and social consequences of the crisis.⁴

1.6 Tech trends are shaping the future of integrity in three important ways:

By a) strengthening integrity and compliance systems within business, b) transforming the integrity environment in which businesses operate; and c) changing global incentives for integrity in business. This paper explores how businesses can work with

governments to leverage new technologies and data intelligence to curb corruption and strengthen integrity, especially in confronting the COVID-19 pandemic. Public-private partnerships for integrity are needed to recover from the crisis.

2

How tech is shaping the future of integrity

2.1 Tech for integrity: Opportunities for business

“Unlocking the next generation of tech for integrity innovations within business entails a combination of actions, focusing in particular on leveraging the power of data

Tech-based, data-intensive innovations enhance the effectiveness of business' compliance systems. Global business has made considerable progress in strengthening its internal integrity systems to fend off fraud, developing ethics standards and compliance programmes to prevent bribery. While compliance is, by its nature, reactive to potential risks, the more proactive concept of collective action is gaining ground, through industry-wide standards, common positions and public-private partnerships.

Business commitment to integrity is critical during and after a crisis, as temptations for fraud and bribery are particularly intense to increase profit margins, defend market shares and gain competitive edge. The reputation costs of integrity breaches will be dire, however. As Alison Taylor underscores: “How companies conduct themselves within and without (during the crisis) will help determine their future societal value. The public will assess whether enterprises deserve to survive.”⁵

Unlocking the next generation of tech for integrity innovations within business entails a combination of actions leveraging the power of data.

- **Strengthen the autonomy of compliance offices and their capacity for integrity analytics.** This entails developing corporate ethics standards, consolidating whistleblowing programmes, strengthening sanctions regimes and expanding the reach of compliance systems to the entire supply chain to local, small and medium-sized enterprises. It also requires promoting integrity policies for small enterprises, using mentoring from larger firms within their supply chain, collective action, and other similar strategies. Digitalizing complaints systems will allow mining the information, identifying risks along the supply chain and addressing critical pain points.
- **Invest in tech innovations and data analytics to mitigate risks, improve due diligence and ensure regulatory compliance.** Data intelligence significantly enhances risk-based

compliance programmes. Insight from risk assessments and investigations helps develop targeted training, tailored guidance and more successful audits, as well as better internal and external reporting. The cooperation between compliance officers, industry regulators and tech start-ups is particularly promising. Regtech solutions developed by tech start-ups have expanded beyond the financial sector and are increasingly being deployed for risk profiling and due diligence.

- **Adopt sound corporate governance practices, informed by evidence and data.** Fostering cooperation with the public sector in the preparation of guidelines and regulations on corporate governance is important. Those should be based on the deeper insight generated by data mining regulations and using data analytics in the preparation of new legislation.
- **Scale-up investments in data infrastructure and strengthen analytics capabilities to generate high-quality assets for business intelligence.** Too much data gets collected; not enough gets used. Business should strengthen its capacities to mine its own data to detect fraud risks, while preserving personal privacy, in line with relevant data protection legislation. The quality of underlying data used by compliance officers is critical, paired with structural data governance protocols to guarantee the quality, integrity and security of the data upon which they rely. In addition, industry-wide and sector-specific codes of conduct on the ethical and responsible use of AI are needed. Many companies are creating chief data and analytics officers to govern their data, which ought to further their cooperation with compliance officers to leverage insight from integrity analytics and better assess risks.
- **Open corporate data.** Business should commit to open up non-sensitive corporate governance data critical for integrity, such as beneficial

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ownership, board membership, interest and asset declarations, lobbying meeting records, and tax records. They should also adopt policies on the disclosure of the financial dealings with public officials and politicians. Tech start-ups can help. For example, [Open Corporates](#) makes publicly available company data accessible in a structured manner, including beneficial ownership, one of the biggest challenges to dealing with tax evasion and money laundering.⁶

- **Disclose private-sector data deemed to be of public interest.** Encourage industry-wide business-to-government data-sharing, as part of business commitment to corporate social responsibility. Business should work with governments to develop standards, regulations and protocols to share non-commercial, non-sensitive private-sector data that is deemed of public interest and whose reuse helps improve public policies (including health safety) and government decision-making. In France, the 2016 Digital Republic Bill introduced the concept of “public interest data”.⁷ In Europe, data sharing between businesses and governments is central to Europe’s [new digital and data strategy](#) unveiled in February 2020, including on AI. In this regard, global business ought to consider the recommendations of the [report](#) of the EU High-Level Expert Group on Business-to-Government Data Sharing.
- **Invest in smarter regulation, leveraging new technologies and data insight.** Advanced analytics help develop better regulations and facilitate regulatory compliance. Business should engage with regulators to improve rule making, risk management and compliance control using crowdsourcing and regtech solutions. Digital databases, data mining and machine learning can improve the making of new regulations and avoid regulatory duplication and conflicting guidelines. Machine learning and natural-language processing techniques make it possible to process large amounts of information, such as public inputs to regulatory proposals. Advanced analytics and AI enable governments to improve the design, delivery and enforcement of regulations, reduce regulatory burden and enhance regulatory impact analysis.

Regulators can use advanced analytics to predict where they should apply their regulatory efforts, including investigations and inspections, or use machine learning tools to predict the likely outcome of litigation. These tech solutions can also enhance regulators’ oversight capacities by streamlining their operations

and deploying their resources more effectively. Solutions provided by regtech and supotech start-ups can help improve regulatory policy. For example, Mexico’s National Banking and Stock Commission has partnered with the [Regtech for Regulators Accelerator](#) to improve its anti-money-laundering safeguards.

- **Integrate a country’s level of digital maturity in risk assessments.** Digital maturity reduces corruption vulnerability. Global business and institutional investors should consider the level of digital maturity of governments in their risk assessments. The COVID-19 crisis has exposed the shortcomings of analogue governments relying on paper and physical processes and is accelerating the need for [governments](#) to go digital. The digital transformation of bureaucracies offers tremendous opportunities to transition towards more agile governance and smarter regulation.⁸ The digitalization and simplification of bureaucratic procedures increases efficiency, reduces costs and streamlines services to business and citizens alike. Digital public services reduce solicitation risks and opportunities for bribery.
- **Move towards cashless economies and digital transactions.** Digital currencies can curb one of the main vehicle for fraud: cash. Digitalizing payments increases transparency in transactions and makes it more difficult to conduct criminal activities and money laundering. Central bank-issued digital currencies mitigate some of the challenges that electronic payments have encountered.⁹ The [Better than Cash Alliance](#) is a partnership of governments and companies that accelerates the transition from cash to digital in a way that improves lives and expands responsible digital financial services.
- **Adopt digital identities and signatures to prevent forgery.** Government-certified digital identities and signatures are a critical foundation to the digital transformation of our economies. The new economy requires digitally enabled authentication systems that certify the identity of digital users. In any financial transaction, knowing your customer is essential to ensure that the funds involved are not linked with crime. Digitally signed documents are harder to forge and reduce solicitation risks by eliminating interactions with public officials. The FATF has recently issued guidance to determine whether a digital ID is appropriate for use for due diligence.¹⁰ Yet, government-validated digital identification systems have been hard to implement.

2.2 Tech for integrity: Opportunities for governments

“ Tech solutions are critical to corruption-proof the response to the public health crisis, as well as the crisis and recovery packages that governments are designing to mitigate its economic and social consequences

The digital transformation of government reduces opportunities for corruption, both grand and petty. The digitalization of the public sector is a driver of change in the integrity space. By eliminating paper and opening up data, it cuts red tape and reduces solicitation risks through the automation of public services, such as business permits and tax payments. The revelation of users' experience with bureaucratic procedures also helps identify vulnerabilities and address pain points, providing an opportunity to service users to be part of the solution. Disruptive technologies such as blockchain are posited to secure transactions and tamper-proof records, making them corruption resilient with an unalterable audit trail. Similarly, digital identity solutions facilitate due diligence to manage compliance risk and prevent money laundering.

The COVID-19 crisis is accelerating the digital transformation of governments and the urgency to implement fully digital public services. The pandemic is a “stress test” on a global scale that gauges the degree of digital resilience of our economies, societies and governments. Tech solutions are critical to corruption-proof the response to the public health crisis, as well as the crisis and recovery packages that governments are designing to mitigate its economic and social consequences. Tech-based and data-driven transparency is more urgent than ever to safeguard integrity in times of crisis.

To rebuild better, governments can pursue game-changing transformations by tackling pending structural challenges, including the following:

- **Accelerate the digital transformation of public services.** Governments around the world are adopting ambitious strategies to transform public services through automation, simplification, and digitalization. The sophistication of e-services varies, however, some providing information only and others with fully transactional information. The coverage of public services and the full end-to-end digitalization of those services also vary. Singapore and Uruguay provide e-services through seamless m-government applications that are paired with a single sign-on. By limiting face-to-face interactions with public officials, digital public services reduce solicitation risks and petty corruption in daily transactions. The success of e-government improvements ultimately rests on governments adopting these technologies and businesses embracing their use.
- **Expand digital government solutions to unlock productivity and competitiveness.** The automation of bureaucratic procedures and the digitalization of government services

are making governments more agile, efficient and predictable. As such, they improve the business climate by reducing the administrative burden and regulatory costs on business; they also increase transparency, predictability and traceability of bureaucratic processes. E-government reforms have enabled improvements in critical dimension of the business climate, as measured by the World Bank's *Doing Business* metrics – starting a business, registering property, getting electricity, getting credit, paying taxes, trading across borders, protecting minority investors, enforcing contracts and resolving insolvency.¹¹ In Africa, Rwanda is an example of the implementation of e-government reforms to enable economic growth.

- **Automate high-risk bureaucratic procedures and public services, reducing discretion and solicitation risks.** The complexity of government transactions adds to corruption risks. For example, in 2017, according to [Transparency International](#), one in three Latin Americans reported paying a bribe to access a service – acquiring an identity document, registering in school, accessing a hospital, dealing with police and the courts, or accessing an utility. The “regulatory addiction” of many Latin American countries increases the costs of doing business.¹² Yet, less than 30% of government transactions can be completed online from end to end and 25% of them require three or more visits to a public office.¹³
- Digital services help cut red tape through the automation of processes and the digitalization of services.¹⁴ Online transactions increase both integrity and agility in regulatory processes. Digitalization and simplification mitigate bribery risks by reducing interactions with public officials, increasing the availability of information, and eliminating opportunities for arbitrary discretion. Digitalization is particularly effective at preventing “petty corruption” in transactions such as paying for utilities, submitting income tax, registering new businesses, paying fines and fees, applying for birth and marriage certificates, registering motor vehicles, and applying for drivers' licences and personal identity cards.¹⁵
- **Focus digitalization efforts on high-risk transactions.** These include in particular tax administration, public procurement and financial management, as well as company licensing and property registration. These public services represent critical pain points in public-private interactions. Business should work with governments to accelerate the digitalization of tax administration (e-filing of taxes), custom administration (trade facilitation), licensing

“Data used for integrity initiatives must be unquestionable in terms of quality and reliability”

(e-licensing), public contacting (e-procurement, e-tendering). For example, according to the World Bank report on digital dividends,¹⁶ e-filing of tax obligations reduced tax compliance costs.

- **Make the paying of taxes easier and corruption-proof.** Paying taxes is one of the main challenges to competitiveness, a critical hindrance of business formalization, and a critical pain point in the corruption chain, as showed by World Bank reports on paying taxes.¹⁷ Digital solutions increase the efficiency of tax collection and reduce tax fraud. Tax agencies have been at the forefront of the digital transformation, making voluntary compliance easier for taxpayers and businesses alike through the digitalization of tax processes, pre-filled tax returns and online payment systems. While having lagged, custom agencies such as Singapore’s are gradually going digital to facilitate trans-border trade.¹⁸

Tax agencies are becoming increasingly savvy at leveraging data analytics and AI to detect and deter tax fraud. They are targeting in particular high-risk areas such as the construction sector, real estate and the art industry. Data mining and fraud analytics solutions, using big data and social networking technologies, are boosting tax authorities’ oversight capabilities. In the US, UK, France and Spain, tax administrations use AI to detect tax evasion. In France, the 2020 budget law provides for increased use of advanced analytics to deter tax fraud and guide tax inspections. Privacy concerns need to be properly managed, however, through robust data governance and integrity rules.

- **Leverage blockchain to secure records and transactions.** Distributed-ledger technologies, when properly designed, have the potential to build corruption-proof public records (such as administrative registries) and government transactions (especially public contracts).¹⁹ The potential of blockchain to curb corruption in government finances and public services cannot be understated, although it is still difficult to ascertain which solutions will stick and scale up.²⁰ The European Commission²¹ has identified four central use cases: identity management, tax reporting, financial flows and regulatory compliance. Its potential is promising for bureaucratic processes critical for business, such as registering land (Georgia, Ukraine) and property (Sweden); managing social transfers (the Netherlands) and pension administration; verifying identity and conducting due diligence; managing government contracting (Chile, Colombia) and regulatory compliance.
- **Encourage governments to follow through on their commitments to open government and open data.** Established in 2011, the Open Government Partnership offers a platform to advance open government reforms, such as bureaucratic simplification, procurement reform

and financial transparency. Opening up public data is a core dimension of those reforms. It is a policy inasmuch as a technology challenge. To be actionable, governments must open their data by default, in an accessible and machine-readable format that allows data to be re-used to boost transparency and detect irregularities in government budgets and public contracting. Governments have made important progress to open up their data, as measured by the [OECD open data index](#) and cities are often leading the way.

- **Invest in data quality and reliability.** Governments and businesses need to guarantee the security and privacy of the personal data with which they are entrusted, but also the reliability of public data. Data used for integrity initiatives must be unquestionable in terms of quality and reliability. It must be trusted and credible. Guaranteeing the integrity of data is thus paramount to integrity ecosystems based on data, and strong governance arrangements must be in place to ensure it. This, in turn, requires reliable public registries and standardized administrative records. Otherwise, advanced analytics and AI solutions will be based on faulty data and leading to biased results – the “garbage in, garbage out” effect.
- **Invest in integrity data.** Business should encourage governments to open datasets critical to uncovering and preventing corruption. The [Open Data Charter’s Anti-corruption Open-Up Guide](#) recommends the release of 30 priority datasets with key attributes for preventing, detecting, investigating and sanctioning corruption.²² These include property registries, procurement data, company registries, but also more granular lobbying registers and political party contributions, asset declarations and tax records.²³
- **Invest in integrity analytics.** Integrity analytics initiatives can be used for insight (to identify red flags), hindsight (to inform investigations) and foresight (to articulate reforms). According to the OECD,²⁴ three conditions are critical to enable integrity actors to leverage data effectively: a robust data infrastructure to ensure that data is of good quality and made available in a timely manner; a sound data governance to ensure the reliability and integrity of the data used; and a tamper-proof data architecture, with the necessary safeguards to ensure the security and privacy of personal data and the ethical use of integrity analytics. The purpose of use of the data must be clearly stated and undertaken by the appropriate institutions with the mandate to act upon the findings. The exchange of sensitive information between integrity actors is challenging, however, requiring clear governance protocols and secure interoperability platforms

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- **Open up government contracting along the entire value chain.** Government procurement is a high-risk area,²⁵ as governments spend between 10% and 30% of GDP on public procurement.²⁶ Governments should implement open data policies and standards in public contracting, such as the [Open Contracting Data Standard](#) of the [Open Contracting Partnership](#). E-procurement systems increase the efficiency and transparency of procurement processes and enable third party monitoring, reducing risks of collusion, price-fixing and corruption. In turn, open contract data can be mined to raise red flags and pinpoint inefficiencies so as to deliver better value for money.

Government procurement agencies are gradually opening contracting data through e-procurement platforms and testing blockchain-based smart contracts to create tamper-proof tendering processes, as in Chile and Colombia. In Ukraine, the government has partnered with tech start-ups and civil society to create an open-source government e-procurement system, [pro-Zorro](#), later extended to the sale of government assets through [ProZorro.Sale](#). This tech solution [reduced corruption](#), improved efficiency and boosted competition. [Moldova](#) is piloting a similar system. In South Korea, the Bid Rigging Indicator Analysis System (BRIAS) facilitates the analytics of collusion in public procurement.

- **Transparency must be preserved during emergencies.** Health pandemics, natural disasters or economic crises provide fertile ground for abuse. Governments' crisis response and recovery programmes tend to carry high risk of abuse, easing controls and increasing discretion to streamline spending decisions. In normal circumstances, corruption consumes between 10% and 25% of the value of public contracts, according to UNDOC.²⁷ This percentage is likely much higher in emergency situations. [Evidence from audits](#) of international aid spending during the 2013–2016 Ebola outbreak in Africa indicate that procurement procedures were widely disregarded. Suspicions of fraud have already emerged in the emergency procurement of medical supplies to fend-off the COVID-19 crisis,²⁸ from [Slovenia](#) to [Brazil](#) to [Colombia](#).

Emergency powers include special provisions to procure much-needed medical equipment to fend off the pandemic. But emergency procurement increases corruption risks through price gouging and outright bribery, pilfering of available supplies, collusion among bidding firms, resale on the black market, or increase in falsified products. The health sector is particularly vulnerable to corruption, in particular the procurement of medicines and medical supplies in a context of high demand and low supply. Even in ordinary times, corruption in the health sector causes losses of over \$500

billion every year, according to Transparency International.²⁹ In the EU, 28% of health corruption cases are related to procurement of medical equipment.³⁰

- **Preventing corruption in the management of the COVID-19 health crisis requires transparent procurement processes and open contracting data.** It is essential that transparency, openness and integrity are maintained and extended across the health sector. Mitigating corruption risks during emergencies typically includes keeping the information on emergency contracting in a central platform and in open-data format to monitor it, such as direct contracting by subnational governments, for instance; keeping a wider picture of the budget in terms of sources of expenditure financing; and use of credible safeguards and alert systems by audit agencies, combined with social oversight mechanisms.³¹

To confront corruption risk in the COVID-19 crisis, Transparency International³² recommends that information on purchases and contracting should be published in open-data format and accessible to allow for tracing and tracking; procurement processes should prevent price gouging and hoarding and promote broad competition; and full disclosure of the resources used during the emergency response. It also suggests activating national anti-monopoly mechanisms to avoid collusion and price speculation; implementing real-time audits for emergency procurement, and developing a single platform to centralize information on emergency procurement to ensure accountability during the emergency response. Ukraine's anti-corruption reforms, for example, oblige all emergency contracts to be publicly available and civil society is able to monitor medical procurement and emergency spending.

- **Transparent rules and open data are also required in income support and other cash transfers to cushion the economic and social impact of the crisis.** Transparency should not take a back seat during the crisis. In the short term, it is critical to embed strong safeguards in deployment of emergency funds in the recovery phase to restart the economy. These include budget financing for health systems, cash transfers to shield vulnerable households, and short-term loans for businesses. The credibility of those programmes hinges upon this transparency. In the medium term, rebooting the economy will entail large investments in infrastructure spending. Following the 2008 financial crisis, for example, the American Recovery and Reinvestment Act established a supervisory board to oversee the management of the stimulus funds, with stringent disclosure and reporting requirements, strengthened internal controls and enhanced prerogatives for oversight agencies.³³

“ Oversight agencies can identify suspicious patterns, using AI to process large amounts of data and quickly detect suspicious patterns

Such safeguards apply to the IMF coronavirus-related emergency relief programmes, in line with the renewed commitment to [integrity](#). Unlike with the Fund’s standard programmes, emergency funds are generally disbursed in lump sums with limited conditions to provide timely support to fend off the crisis. The Fund’s new governance framework, adopted in 2018, commits it to systematically address corruption risks in its surveillance and [lending](#).

- **Digital solutions can help manage emergency funds in an efficient and transparent manner.** Many governments are considering direct cash transfers to households and small businesses as part of their crisis response. The importance of government-to-person digital payments has never been more important than now, as part of the relief funds deployed to shield the most vulnerable from the social impact of the COVID-19 crisis.³⁴ Digital identification systems help target social assistance and digital payments ensure that the resources reach those for whom they are intended. Digital platforms can track emergency funds and the infrastructure investments they finance.³⁵ In the US, for example, a [digital platform](#) monitored stimulus spending by the federal government following the 2008 financial crisis. In Brazil, disbursements of the [Amazon Fund](#) can be tracked through a blockchain-based platform.
- **Ministries of finance must continue to disclose fiscal information and budget data,** and visualize it effectively through state-of-the-art open budget data portals. This is particularly relevant for subnational governments, which are receiving larger budget transfers and more responsibilities as part of decentralization processes. [The Global Initiative for Fiscal Transparency](#) supports governments in the development of budget transparency portals and open fiscal data packages to publish government spending data in comparable and reusable format. The use of new technologies by fiscal institutions reduces the risk of misappropriation of public funds. A growing number of countries provide open access to government data in a machine-readable format that allows citizens and civil society to mine and analyse the data. It can increase transparency and accountability by showing where and how public money is spent. Oversight agencies can identify suspicious patterns, using AI to process large amounts of data and quickly detect suspicious patterns.

- **Public investment and infrastructure spending are another high-risk area.** Geo-referencing technology is helping governments monitor corruption-prone infrastructure investments more effectively. Colombia developed an [e-platform](#) to track public works financed by mining royalties, with the support of the Inter-American Development Bank, which developed a geo-referencing monitoring platform, [mapainversiones](#).³⁶ [Paraguay](#) is using a similar open-data platform to track COVID-19-related public spending, including government contracts, public subsidies and cash transfers. Audit agencies are able to use this technology to monitor public works, as in Peru through the [Infobras platform](#) of the Comptroller General’s Office. Cities, such as Buenos Aires with its open public works portal, have often taken the lead.
- **Expand the use of data analytics by oversight agencies.** Audit agencies and oversight institutions are piloting data intelligence tools to detect red flags in public spending and government contracting. In Brazil, the [observatory of public spending](#) has detected irregular practices in social benefits programmes by cross-referencing databases. In Colombia, the audit office has developed a data intelligence tool, [Océano](#), to detect irregularities in public contracts. Audit agencies must adopt codes of conduct for the ethical and responsible use of AI. In 2019, the OECD issued a set of [principles on artificial intelligence](#) and several countries are moving forward to articulate [AI policies](#) for the public sector, including for oversight purposes.
- **Accelerate the digital transformation of the courts to make justice systems more agile, reliable and predictable.** Judicial authorities are lagging behind in their digital transformation, in terms of the automation of judicial proceedings, the digitalization of legal services, and digital tracking of cases, across civil, commercial and criminal justice systems. They must invest in automating processes, generalizing digital records and improving users’ experience, redefining justice processes as a public service. Some progress has been made in judicial registries – such as company registries – but the digital transformation of litigation and conflict resolution is lagging. Spain and [Portugal](#) have implemented promising reforms, combining digital solutions and behavioural insight.³⁷ The courts must also open up their own data to restore trust in the judiciary and fight judicial corruption. This includes information about case processing times; judges’ and prosecutors’ salaries and selection processes.

2.3 Tech for integrity: Reshaping global incentives

To achieve systemic change, the incentives that allow corrupt behaviour must be confronted and changed. In the digital age, the global marketplace is evolving from a shareholder system to a stakeholder system, as envisioned by the World Economic Forum's [Davos Manifesto](#). This manifesto includes global business' renewed commitment to zero tolerance for corruption. Global citizens and digital natives expect more social responsibility from business, and the aftermath of the COVID-19 crisis will likely increase these expectations and aspirations. Advances in fraud intelligence have increased the likelihood of corrupt practices being detected and sanctioned. The costs of corruption to business have increased, as have the benefits of integrity in terms of company reputation and investment risk.

In the data-driven digital age, the global narrative on anti-corruption is shifting from an emphasis on the costs of corruption to one recognizing the benefits of integrity. Integrity is good for business and is good business. After the latest wave of global corruption scandals, multinational companies are under more legal and social pressure to conduct transparent and honest business dealings, as a result of higher ethical business standards, greater international regulatory cooperation, and more robust compliance systems.

A number of structural reforms are warranted to change the global incentives shaping business practices, especially in international finance:

- **Institutional investors should integrate corruption risks and integrity benefits more explicitly in their investment policies.** Responsible investing means investing in ways that do not reward fraud, bribery and other underhand practices. Institutional investors and asset managers have a key role in the global fight against corruption. Through their investment policies, they help set corporate standards, create incentives for businesses and influence the market valuation of companies. Global finance must support the UN-backed [Principles for Responsible Investment](#), a set of voluntary investment principles to incorporate governance and corruption considerations into investment practices, especially in high-risk sectors such as construction (COST standards) and extractives (EITI standards). More than 1,500 signatories from over 50 countries, representing \$60 trillion in assets, have endorsed the PRI.
- **Credit agencies should integrate corruption risk as a critical dimension of sovereign risk.** The level of corruption can affect a country's willingness and ability to pay back its debts. Sovereign defaults are often associated with corruption and there is evidence that

transparency lowers risk premiums and borrowing costs.³⁸ Corruption also affects borrowing costs indirectly through its corrosive impact on the rule of law. Credit risk agencies are already moving in that direction. Moody's assessment of a country's institutional strength is based 25% on the credibility of public policies and 75% on governance risk, including corruption risk. In addition, in the age of data marked by increasing risks associated with breaches of data, credit risk agencies need to better assess the robustness of governments' data governance arrangements.

- **Sovereign wealth funds should integrate corruption risk into their investment strategies,** creating market incentives to influence the behaviour of the companies in which they invest – or disinvest. A good practice is the Norwegian sovereign wealth fund. Its Ethics Council recommends the exclusion or observation of companies, including disinvesting, based on the firms' adherence to environmental, social and, increasingly, governance standards, in particular in high-risk sectors such as extractive industries. The [International Forum of Sovereign Wealth Funds](#) has an important role in this context.
- **Philanthropic foundations need to make corruption a key concern of their investment policies, ensuring greater consistency between their investments and their missions.** Foundations must make an explicit link between their investment policies of the endowments that finance their grant activity and the objectives they pursue through their grant activity. This coherence is central to the credibility of philanthropic endeavours and corporate social responsibility initiatives.
- **Promote global standards on data governance, both in the public and private sectors, to guarantee integrity in data governance.**³⁹ This requires stronger multilateral approaches and greater international data cooperation. The time has come to consider establishing a World Data Organization to govern global data standards and data-sharing rules. The EU's General Data Protection Regulation of 2016 proposes a sound standard to regulate the use of personal data and the protection of privacy. Businesses must upscale their data infrastructure and governance accordingly. [Legal techs](#) can help businesses evaluate the robustness of their data governance according to these standards.
- **Businesses need to develop risk management strategies to unlock the value of data, secure data privacy and prevent data breaches.** A market-based option would

🗣️ **We need to know more about the evolving nature and impact of cybercrime and how it, too, is leveraging new technologies and data analytics.**

consist of developing voluntary standards on data governance and creating an independent ISO-type certification mechanism to assess companies' compliance. This certification system could be used by credit agencies and institutional investors to assess the maturity of data governance systems for credit scoring of companies and sovereign risk of governments.

- Work with and invest in integrity start-ups. Govtech start-ups are becoming critical allies of integrity actors.⁴⁰ Corporate venture and venture investors should support and invest in those tech start-ups that are seeking to improve government integrity. Integrity start-ups are emerging as a new generation of civic start-ups that seek to accelerate anti-corruption efforts by leveraging tech solutions and data insight. In 2019, the IMF launched a [global anti-corruption challenge](#) to document tech-based and data-driven anti-corruption innovations. The World Economic Forum's [Tech for Integrity \(T4I\) platform](#) provides a global repository for integrity solutions by tech start-ups.
- **Govtech start-ups represent a new form of public-private partnerships to accelerate integrity solutions in government.** Governments should work with these start-ups, which use disruptive technologies, data intelligence and agile methodologies to provide services to solve public problems, including corruption.⁴¹ For example, [TransparentBusiness](#) provides a digital solution to prevent overbilling fraud. In the United Kingdom, Denmark, France and Poland, governments are partnering with start-ups through challenge programmes and govtech accelerators. They are seeking to foster govtech ecosystems through more flexible public procurement for innovation. Venture

capital and angel investors are starting to invest patient capital in those start-ups.

- **Increase international cooperation to tackle cybercrime and cybersecurity risks.** As digital transformation deepens, cybersecurity risks increase. The digital age is witnessing new cybercrimes that need to be better understood and mitigated. We need to know more about the evolving nature and impact of cybercrime and how it, too, is leveraging new technologies and data analytics.⁴² Ransomware and malware attacks increasingly hold various governments to ransom over critical data, spiking in 2019.⁴³ Along with the healthcare industry, governments are among the top targets for ransomware. These incidences are caused by individual criminals, organized crime groups, terrorists, and states or state-sponsored actors, and they primarily involve the disruption of digital and physical systems, theft, and cyber espionage.
- **Address the misuse of technology and data analytics by organized crime, without hindering innovation and value.** Organized crime, including [drug cartels](#),⁴⁴ is increasingly tech savvy. Interpol and financial intelligence units (FIUs) have flagged the high anti-money-laundering risks of crypto assets, as cryptocurrency exchange platforms play an increasing role in money-laundering circuits. We need to know more about the various uses of cryptocurrencies and digital assets by criminal organizations and, more broadly, the changing nature and variety of forms of cybercrime. This calls for stepped-up efforts to regulate crypto assets and initial coin offerings, at both the domestic and international level, in terms of illicit deals, money laundering and tax evasion, while enabling their adequate use by citizens.

3

Tentative conclusions in uncertain times

3.1 New forms of public-private partnership are needed to hack corruption, especially in view of the COVID-19 crisis.

New technologies and data insight have become the great allies of transparency and accountability in the digital era. To leverage them effectively as a force for good, we need to strike the right balance between privacy rights and corruption prevention,

based on smart regulation and the responsible use of AI. Nowhere is this debate more fundamental than in public health, and the need to restore our national public health systems to prevent other health crises in the future.

3.2 In this context, businesses and governments need to find ways to better leverage private-sector data for the common good.

Global business should anticipate those changes to better support them, and encourage companies to pool and share data by creating trusted infrastructure for data-sharing for the common good and in the public interest. To facilitate this, business must work with governments to develop model

and standards for data-sharing between the public and private sectors through “data collaboratives”, as proposed by [GovLab](#), and “data trusts”, as advanced by the [Open Data Institute](#), and support alternative data production and governance models

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1. Co-chaired by Delia Ferreira-Rubio and Duncan Wood. He is grateful to Gonzalo Guzmán, Enrique Zapata, Camilo Cetina, Nathalie Gerbasí, Bruna Santos and Gerardo Uña for their comments and suggestions.
2. World Bank. *Behavioural Science Around the World* (Washington, DC: World Bank, 2018).
3. Sarah Steingrüber, *Coronavirus and the Corruption Outbreak*, [Global Anticorruption Blog](#), 31 March 2020.
4. Rosamond Hutt, *The economic effects of COVID-19 around the world*, World Economic Forum [blogpost](#), 9 April 2020.
5. Alison Taylor, *COVID-19 and business integrity: A stunned and needy world is watching*, FCPA [blogpost](#), 1 April 2020.
6. This includes establishing and publishing a registry of ultimate beneficial ownership of all corporate entities and similar legal vehicles including trusts, adopting effective sanctions for untruthful registration.
7. Paula Forteza, *Why data from companies should be a common good*, Apolitical [blogpost](#), 1 October 2019.
8. World Economic Forum, *Agile Governance: Reimagining Policy-making in the Fourth Industrial Revolution*, Geneva: World Economic Forum, 2018.
9. Digital payments are growing at an estimated 12.7% annually, and are forecast to reach 726 billion transactions annually by 2020. By 2022, an estimated 60% of world GDP will be digitalized. FATF (2020). *Guidance on Digital ID*, available [here](#).
10. FATF (2020). *Guidance on Digital ID*, available [here](#).
11. João Martins and Linda Veiga, "Electronic Government and the Ease of Doing Business," in *ICEGOV '18: Proceedings of the 11th International Conference on Theory and Practice of Electronic Governance*, April 2018, pp 584-587, available [here](#).
12. Carlos Santiso, "Can Agile Governance Restore Trust in Government?" *Dubai Policy Review* no. 2, February 2020, available [here](#).
13. Benjamin Roseth, Angela Reyes and Carlos Santiso, *Wait No More: Citizens, Red Tape and Digital Government* (Washington DC: IDB, 2018) available [here](#).
14. Basel Institute on Governance, *Perspectives in e-government and the prevention of corruption* (Basel, Switzerland: Working Paper 23, 2017), available [here](#).
15. Lay Lian Chuah, Norman V. Loayza, and Bernard Myers, *The Fight against Corruption: Taming Tigers and Swatting Flies* (World Bank: Policy Brief No. 27, Malaysia Hub, January 2020).
16. World Bank, *World Development Report 2016: Digital Dividends* (Washington DC: World Bank, 2016), available [here](#).
17. World Bank and PwC. *Paying Taxes in 2020* (Washington DC: World Bank 2020), available [here](#).
18. World Customs Organization, "Digital customs: the opportunities of the information age", *WCO News* 19, February 2016, available [here](#).
19. The main benefits of applying blockchain technology in governments include reduced costs, time and complexity in inter-governmental and public-private information exchanges that enhance the administrative function of governments; reduction of bureaucracy and discretionary power, induced by smart contracts; increased auditability of information in governmental registries and traceability of government transactions; and increased trust of citizens and companies in government processes, transactions and record-keeping.
20. Carlos Santiso, *Will Blockchain Disrupt Government Corruption?* Stanford Social Innovation Review [blogpost](#), 5 March 2018.
21. European Commission, *Blockchain for digital government* (Brussels: EC 2019), available [here](#).
22. Camilo Cetina, *Tres preguntas sobre el uso de los datos para luchar contra la corrupción* (Bogotá, Colombia: CAF DIDE Policy Brief No. 9, April 2020), available [here](#).
23. In 2017 in Colombia, govtech start-up Datasketch collaborated with Transparency International Colombia to mine data on public contracts and link it with campaign finance. See: <https://www.datasketch.co/p/conoce-elecciones-y-contratos>
24. OECD, *Analytics for integrity: Data-driven approaches for enhancing corruption and fraud risk assessments* (Paris: OECD, 2019a), available [here](#); OECD. *The path to becoming a data-driven public sector* (Paris: OECD, 2019b), available [here](#)
25. Transparency International. *Curbing corruption in public procurement* (Berlin: TI 2014), available [here](#).
26. OECD, *Preventing corruption in public procurement* (Paris: OECD 2016), available [here](#).
27. UNODC, *Guidebook on anti-corruption in public procurement and the management of public finances* (Vienna: UNODC, 2013), available [here](#).
28. Sarah Steingrüber, et al., *Corruption in the time of COVID-19: A double-threat for low income countries*, Bergen, Norway: U4 Basic guide, 27 March 2020, available [here](#).
29. Transparency International, *The ignored pandemic* (Berlin: TI, 2019), available [here](#).
30. Transparency International, *Making the case for open contracting in healthcare procurement* (Berlin: TI, 2017), available [here](#).

31. Camilo Cetina, *Tecnología para la integridad en tiempos del COVID-19* (Bogota, Colombia: CAF DIDE Policy Brief No.8, April 2020) available [here](#); Gavin Hayman, Emergency Procurement for COVID-19: Buying Fast, Open and Smart, Open Government Partnership [blogpost](#) of 24 March 2020; Transparency International. Coronavirus sparks high risk of corruption across Latin America, [press release](#) of 26 March 2020; Transparency International. In times like these, transparency matters more than ever, [press release](#) of 29 March 2020.
32. Transparency International. *Public procurement during states of emergency* (Berlin: TI 2020) available [here](#).
33. It provided that all contracts and disbursements under the stimulus plan should be fully transparent and immediately accessible to the general public in open format; all contractors and subcontractors that receive stimulus funds should be required to provide beneficial ownership information; contracts under the stimulus plan should include anti-corruption and clawback clauses to prevent fraud by contracting companies; and the stimulus should include strong additional whistleblower protections for those who disclosure corruption or fraud associated with the stimulus.
34. According to the [World Bank](#), 84 countries have changed their social protection systems in response to the COVID-19 crisis, of which 58 are scaling up cash transfer schemes.
35. Roberto de Michele and Juan Cruz Vieyra. *How Transparency Can Save Lives in the Coronavirus Crisis*, Americas Quarterly [blogpost](#), 2 April 2020.
36. Theodore Kahn, Alejandro Baron and Juan Cruz Vieyra, *Digital technologies for transparency in public investment: New tools to empower citizens and governments* (Washington DC: IDB Discussion Paper No. IDB-DP-634), available [here](#).
37. OECD, *Justice Transformation in Portugal* (Paris: OECD 2020), available [here](#).
38. Ugo Panizza, *The Use of Corruption Indicators in Sovereign Ratings* (Washington DC: IDB Technical Note 1318, 2017).
39. A data governance system encompasses a data policy setting the principles, a data strategy to implement a data-driven public sector, a data governance ecosystem establishing the respective responsibilities of government agencies, a data architecture guaranteeing the production and sharing of high-quality data, and an AI strategy regulating the responsible use of data in government.
40. Carlos Santiso and Idoia Ortiz de Antiaño, *Govtech y el futuro del gobierno* (Bogotá, Colombia, and Madrid, Spain: CAF and IE, forthcoming).
41. Carlos Santiso, *Here's how tech can help governments fight corruption*, World Economic Forum [blogpost](#), 9 December 2019; and Carlos Santiso, *Here's how technology is changing the corruption game*, World Economic Forum [blogpost](#), 28 February 2019.
42. The World Economic Forum ranks cybersecurity risks among the top 10 sources of global risks. In the first half of 2018, cyberattacks compromised 4.5 billion records, which was almost twice the amount of records compromised during the entire year of 2017. See World Economic Forum (2019). *Global Risks Report 2019* (Geneva: World Economic Forum), available [here](#).
43. Deloitte (2020) *Ransoming government*, available [here](#).
44. Mexican drug cartels are suspected to be turning to Chinese cryptocurrency gangs to launder criminal cash. See [here](#).



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