

Unlocking Government Productivity in the Middle East

Ten High-Impact Programs

**WORLD
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Executive Summary

Governments around the world are facing increasing pressure to raise the productivity of public-sector entities. Historically high fiscal deficits and low levels of trust pressure governments to retreat from providing services or otherwise reduce spending, but citizens expect governments to take on greater responsibilities, including expanding healthcare benefits, promoting industrial growth, and protecting the environment.

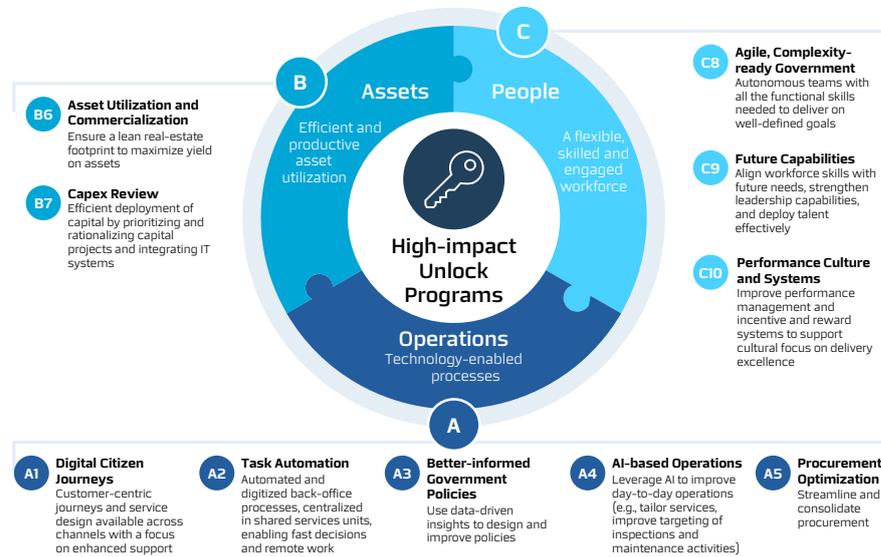
These pressures are particularly pronounced in the Middle East, where government spending represents between 22 and 56% of GDP¹. Moreover, declining oil revenues have recently widened the gap between growing citizen expectations and the financial resources available to meet them.

Based on our analysis, governments have a sizable opportunity to boost productivity across government organizations in the region through better tools and processes, a more highly skilled workforce, and more efficient ways of working. We analyzed eight countries in the greater Middle East (Bahrain, Egypt, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, and the United Arab Emirates) and found that traditional productivity levers, such as upskilling and procurement centralization, could bring productivity gains of 7 to 13%. Additionally, cutting-edge solutions such as advanced analytics and digitization could boost productivity by up to 33%. On top of that, large-scale structural programs expected to reach maturity in the coming decade could see government productivity gains reach 32 to 49%.²

¹ International Monetary Fund, "World Economic Outlook Database," October 2021, [imf.org](https://www.imf.org).
² Calculations based on the government productivity model built for the purpose of this report.

We identified ten potential high-impact unlock levers that governments could introduce across three areas: operations, assets, and people (Figure 1).

Figure 1:
Priority Interventions Can Be Clustered Into Ten High-Impact Unlock Programs.



For each, we present success stories from countries that harnessed such levers to unlock productivity gains.

Our analysis has also revealed five crucial lessons that could help governments increase their productivity:

1. Focus on sectors where most gains are concentrated, such as education and healthcare
2. Reskill government employees to enable redeployment in areas less exposed to automation
3. Utilize traditional productivity improvements, which can drive almost as many gains as automation
4. Evaluate building analytics capabilities, particularly in large resource allocation programs (for example, economic affairs and infrastructure) or processes offering large opportunities for fraud (for example, tax authorities)
5. Consider going agile to drive cross-functional collaboration (for example, managing of complex transactions across sectors and functions and strategy and planning).

In the coming years, governments may have to manage reduced resources while delivering higher quality services. Decision makers must act with conviction as the stakes are high - without improved productivity, limited resources make meeting public expectations impossible.



Mounting Pressure on Governments

Governments around the world face increasing pressure to raise the productivity of public-sector entities. These pressures arise from a combination of tightening fiscal conditions and growing expectations of citizens on the ability of governments to deliver essential public services.

Deficits worldwide are expected to grow to 7.7% of global GDP in 2021 and remain high in 2022 at 5.3% (versus pre-Covid 3.8% in 2019). In fact, according to the IMF, government deficits in emerging economies³ rose 42% between 2019 and 2021.⁴

42% increase

in government deficits of emerging economies (2019 vs 2021)

At the same time, trust in government is low, with 58% of people distrusting government leaders to address the country's challenges⁵. On average, people see their own governments as both less competent and less ethical than businesses, the media, or NGOs.⁶

58% of people

distrust government leaders to address the country's challenges

In 26 major countries surveyed by Edelman, on average, 58% of people distrust government leaders when it comes to addressing national challenges. Furthermore, in six major countries surveyed by McKinsey,⁷ the average satisfaction with public services was 24 percentage points less than the top-performing private industry and 14 percentage points less than the bottom-performing private industry.⁸

Trust and satisfaction are deeply connected.⁹ McKinsey's Public Sector Journey Benchmark Survey¹⁰ revealed customer experience can drive better critical outcomes for government agencies. Satisfied government customers are on average nine times more likely to trust a government agency providing the service as well as to agree an agency is delivering on its mission. Customer satisfaction can also help government institutions meet or exceed their budgetary goals. Our research results show that dissatisfied citizens are twice as likely to contact agency hotlines three or more times for help.¹¹

Yet against this backdrop of distrust and dissatisfaction, governments are still expected to deliver across an ever-widening range of challenges. Recently, governments are taking on new roles: more than 90 governments have enacted data-privacy regulations¹², more than 170 have committed to fight climate change,¹³ and more than 180 have imposed lockdowns to fight the COVID-19 pandemic.¹⁴

3 Countries classified as emerging market and developing economies by IMF.

4 Calculations based on data from the International Monetary Fund "World Economic Outlook Database," October 2021, imf.org.

5 Edelman, "Edelman Trust Barometer 2021: Global report", Edelman, 2021.

6 Ibid.

7 The survey measured customer satisfaction across government and private sector services in Canada, France, Germany, Mexico, United Kingdom, and United States.

8 McKinsey, "Public Sector Journey Benchmark Survey," 2018.

9 Tony D'Emidio, Julia Klier, Jonah Wagner, and Thomas Weber, "The public sector gets serious about customer experience", August 2019, McKinsey.com.

10 McKinsey, "Public Sector Journey Benchmark Survey," 2018.

11 Tony D'Emidio, Sarah Greenberg, Kevin Heidenreich, Julia Klier, Jonah Wagner, and Thomas Weber, "The global case for customer experience in government," September 2019, McKinsey.com.

12 InCountry, "Country Compliance Research Center", incountry.com.

13 "The Paris Agreement: Status of Ratification," United Nations Framework Convention on Climate Change, unfccc.int.

14 Thomas Hale, Tilbe Atav, Laura Hallas, Beatriz Kira, Toby Phillips, Anna Petherick, and Annalena Pott, "Variation in US states' responses to COVID-19," Blavatnik School of Government, bsg.ox.ac.uk.

And looking forward, new challenges loom. Governments everywhere will need to tackle changing requirements for the workforce. While technology was already one of the largest disruptors of work, the outbreak of the global pandemic has forced companies and consumers to change the way they operate and redesign work processes. In its report on the future of work after COVID-19, the McKinsey Global Institute assessed the lasting impact of the pandemic on labor demand, the mix of occupations, and the workforce skills required¹⁵. One of the key trends that is expected to reshape work after the pandemic is the faster adoption of automation and artificial intelligence (AI), especially in work arenas with high physical proximity.

McKinsey's global survey of 800 senior executives conducted in July 2020 revealed that since the start of the COVID-19 outbreak, 85% of companies accelerated the digitization of employee interactions and collaboration (such as videoconferencing and file sharing) either somewhat or significantly, two-thirds accelerated the deployment of automation technologies and AI-driven software that can perform processing workflows, and 48% accelerated digitization of customer channels (for example, via ecommerce, mobile apps, or chatbots).¹⁶ Those changes in turn will create greater demand for workers to fill jobs in areas such as cybersecurity and data analytics.

Additionally, governments will operate in an increasingly competitive global economy where already the top 50 cities account for 21% of world GDP and have an output per capita 45% higher than cities in the same region and income group.¹⁷

Specific Pressures on Governments in the Middle East

While each country has its own unique context, four trends that are prevalent across most of the region shape the pressures on governments in the Middle East to boost productivity.

1. High Citizen Expectations

Citizens across the globe have high expectations of government responsibilities and the quality of public services, but those expectations may be particularly high in the Arab region—or at least there is a wider consensus for a large role of the government.

Almost all Arab youth¹⁸ expect the government to provide essential public services to all citizens, in particular: safety and security (96%), education (89%) and healthcare (88%). Sizeable majorities also expect the government to provide all citizens with subsidized energy (78%), secure jobs (78%), and housing (60%). Furthermore, only 2 to 4% of Arab youth do not expect the government to provide these services to anyone, even those in need (Exhibit 1).

¹⁵ Ibid.

¹⁶ Susan Lund, Wan-Lae Cheng, André Dua, Aaron De Smet, Olivia Robinson, and Saurabh Sanghvi, "What 800 executives envision for the postpandemic workforce," September 2020, McKinsey.com.

¹⁷ James Manyika, Sree Ramaswamy, Jacques Bughin, Jonathan Woetzel, Michael Birshan, and Zubin Nagpal, "'Superstars': The dynamics of firms, sectors, and cities leading the global economy," October 2018, McKinsey.com.

¹⁸ "A Call for Reform: A White Paper on the Findings of the 11th Annual The Arab Youth Survey 2019," ASDA'Ä BCW, 2020, arabyouthsurvey.com. The Arab Youth Survey explores attitudes among Arab youth in 15 countries, including the Gulf Cooperation Council states (Bahrain, Kuwait, Oman, Saudi Arabia and the UAE), North African countries (Algeria, Egypt, Libya, Morocco, and Tunisia), the Levant (Iraq, Jordan, Lebanon and the Palestinian Territories) and Yemen.

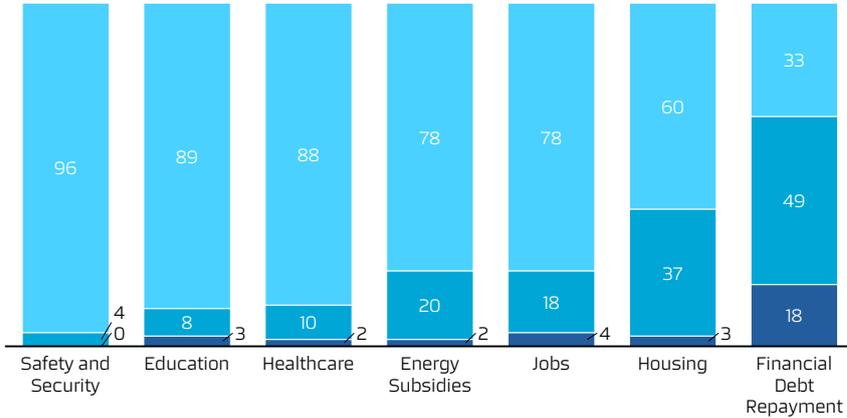
Exhibit 1:

Arab Youth Expect Government to Provide a Range of Services and Safeguards to All Citizens.

Government's Responsibility

% of Responses, 2019

■ All citizens
 ■ Only those in need
 ■ No one. It's not the government's responsibility



Source: 2019 Arab Youth Survey

Comparing the results of the Arab Youth Survey with citizen expectations¹⁹ in 35 countries,²⁰ we can observe that respondents from Arab countries have higher expectations of their governments (Exhibit 2).

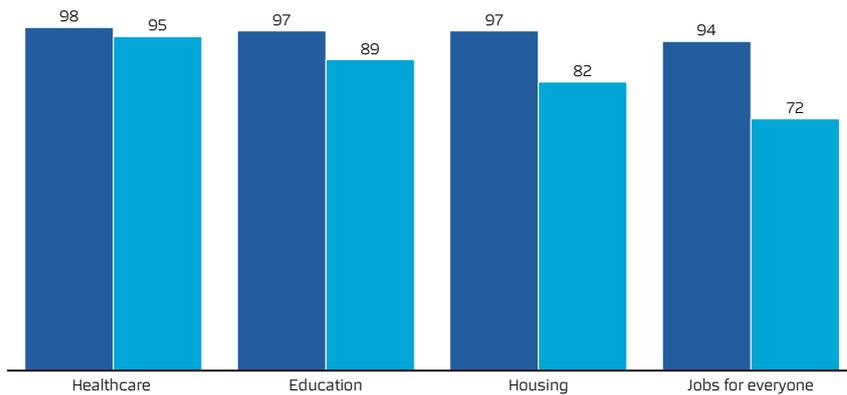
Exhibit 2:

Compared With Citizens of Many Other Countries, Arab Youth Expect Government to do More.

Government's Responsibility

% of Responses, 2016–19

■ Arab youth ■ Global average



Source: International Social Survey Program: Role of Government, 2016; 2019 Arab Youth Survey

19 International Social Survey Programme, "Role of Government," 2016, gesis.org.

20 Mostly advanced and middle-income countries and territories in all continents: Australia, Chile, Taiwan, Croatia, Czech Republic, Denmark, Finland, France, Georgia, Hungary, Iceland, India, Japan, South Korea, Latvia, Lithuania, New Zealand, Norway, Philippines, Russia, Slovakia, Slovenia, South Africa, Spain, Suriname, Sweden, Switzerland, Thailand, Turkey, United States, Venezuela, Belgium, Germany, Israel and Great Britain.

2. Large Roles In The Economy

Middle Eastern governments' spending as a share of GDP varies widely among countries. This variation is mostly in line with global averages for countries in different stages of development, being 31% for emerging markets and 46% for advanced economies. When we look at eight countries of the greater Middle East which we analyze in this report, countries such as Egypt and Pakistan have relatively small government budgets (20 to 30%), while countries such as Bahrain, Oman, Qatar, Saudi Arabia, and the United Arab Emirates have large budgets (30 to 40%). Kuwait however, take a substantial lead in the size of their government budgets, with a spending of 56%.²¹

However, government spending doesn't tell the whole story. Governments across the region play an outsized role in their economies through other means. For example, four out of the ten largest sovereign wealth funds by total assets in the world are in the region²²; it hosts some of the largest nationally-owned oil and gas companies in the world, including Saudi Aramco and ADNOC; and at least 16 of the region's 20 largest publicly traded companies are at least partially state owned.²³ State-owned companies play large roles in industries where they are commonly found globally, including telecom, finance, and transportation, but also in less common ones like manufacturing, property management, or entertainment.²⁴

So a productive public sector may play an outsize role in ensuring the prosperity of countries in the Middle East.

3. Dependency On Oil

Oil remains a significant source of economic growth and the primary factor in economic performance in several Middle Eastern countries, despite diversification efforts. For example, in Saudi Arabia, non-tax revenues (mostly from oil rents) accounted for 73% of the 2022 budget".²⁵

Oil prices are strongly influenced by the global economic outlook. The oil dip associated with the COVID-19 pandemic, showed the risks of an overreliance on oil, with prices collapsing to below \$20 per barrel in April 2020. And the outlook might get gloomier, as the world approaches peak oil, which some in the industry believe has already happened.²⁶ In fact, OECD countries already reached peak oil in 2005,²⁷ and McKinsey's own analysis predicts peak oil to be reached in 2029, with peak gas coming in 2037.²⁸

21 International Monetary Fund, "World Economic Outlook Database," October 2021, [imf.org](https://www.imf.org).

22 Sovereign Wealth Fund Institute, "Sovereign Wealth Fund Rankings By Total Assets As Of 2021," [swfinstitute.org](https://www.swfinstitute.org).

23 Forbes Middle East, "The Middle East's Top 100 Companies 2020," June 2020, [forbesmiddleeast.com](https://www.forbesmiddleeast.com).

24 OECD, "The Size and Sectoral Distribution of SOEs in OECD and Partner Countries," 2017, [oecd.org](https://www.oecd.org).

25 <https://assets.kpmg/content/dam/kpmg/sa/pdf/2021/budget-2022-en.pdf>

26 "Energy Outlook: 2020 edition," BP, [bp.com](https://www.bp.com).

27 "World Oil Outlook 2045," OPEC, 2020, [opec.org](https://www.opec.org).

28 Christer Tryggestad, Namit Sharma, Ole Rolser, Bram Smeets, Jasper van de Staaij, and Tamara Gruenewald, "Global energy perspective 2021," January 2021, [McKinsey.com](https://www.mckinsey.com).

4. Growing Population

The working-age population across the Middle East is expected to grow significantly in the coming years. Saudi Arabia alone will add around 2.5 million to its working age population (~15% of current). It will require additional efforts from the government to run the labor market in a way that meets national goals, including a target of roughly 30% workforce participation by women under Vision 2030 (22% in 2019) and 7% Saudi unemployment rate target under Vision 2030 (12% in 2020 Q1).²⁹ The scale of the challenge is even larger in Egypt and Pakistan, which expect working-age population growth of 10 million and 28 million people, respectively, by 2030³⁰. The number of young people not working or studying is set to grow to 5 million in Egypt and 14 million in Pakistan.³¹

Furthermore, in these countries, population growth will require the rapid expansion of education and healthcare in a relatively short time, requiring additional public spending. With ~70% of Arab youth preferring to work in the public sector,³² there will be significant pressure on these governments to expand the public workforce or enable the creation of competitive opportunities in the private sector—a change that might also require additional spending to attract and support new highly productive private ventures.

...

We already are seeing the impact of many of these pressures in the form of large fiscal deficits across the region. In 2019, the average deficit for the eight countries considered in this report³³ was at a moderate level of 3.2%, but mostly because three countries were in a surplus (Kuwait at 5%, Qatar at 4.9%, and the United Arab Emirates at 0.6%),³⁴ while deficits of other³⁵ countries were between 4.5% and 9%. The expected average deficit for all eight countries in the region in 2021 is 3.4%, and 1.8% in 2022.³⁶

The Meaning of Increasing Productivity

It's important to clarify what we mean by productivity. Productivity is a relational concept measuring the ratio between inputs and outputs or outcomes. This means that greater productivity can be achieved both by reducing the inputs needed (efficiency gains) or by improving outputs or outcomes (quality improvements).

Efficiency gains would include lower cost to serve (for example, lower spending per student or patient), asset-light operations (for example, lower capex per new hospital bed or new social housing home), effective fraud detection (for example, higher average returns per inspection and tax collection effectiveness), and high-yield asset management (for example, higher returns on renting publicly owned lands).

29 Saudi Arabia, "Vision 2030", vision2030.gov.sa.

30 United Nations Development Program, "World Population Prospects 2019," Un.org.

31 International Labour Organization, "Youth Labour Statistics," Ilostat.org.

32 2019 Arab Youth Survey.

33 Bahrain, Egypt, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, and the United Arab Emirates.

34 International Monetary Fund, "World Economic Outlook Database," October 2021, imf.org.

35 Bahrain, Egypt, Oman, Pakistan, and Saudi Arabia.

36 International Monetary Fund, "World Economic Outlook Database," October 2021, imf.org.

Quality improvements could be reflected in macroeconomic performance (for example, economic growth and unemployment), customer satisfaction (for example, net promoter score of government services), and standards of living (for example, healthy life expectancy, disposable income, crime rates, literacy rates, and Program for International Student Assessment scores).

Yet, in practice the same measure can improve efficiency and quality. For example, by digitizing citizen journeys, governments can replace the people and real estate used by in-person services (therefore lowering cost to serve) and improve satisfaction (thereby improving quality).

Furthermore, government can often decide whether to make an efficiency gain or a quality improvement out of a specific initiative. For example, if investments in automation mean doctors can spend less time filling out paperwork, fewer doctors would be needed to achieve the same standard of care, or the same number of doctors could see patients faster and start treatments sooner, thus improving health outcomes.

Productivity enhancements are about freeing resources to be redeployed where they are most needed, not necessarily about reducing the resources available for the delivery of public services.

Sizing the Productivity Opportunity in the Middle East

While the concrete potential of productivity enhancements depends on the level of existing inefficiencies and level of ambition, high-level estimates can be useful to steer policy making. In fact, one of the key findings of McKinsey's research on the success factors of digital transformations is that having clear key performance targets associated in the transformation is the single most important predictor, doubling the chances of success.³⁷

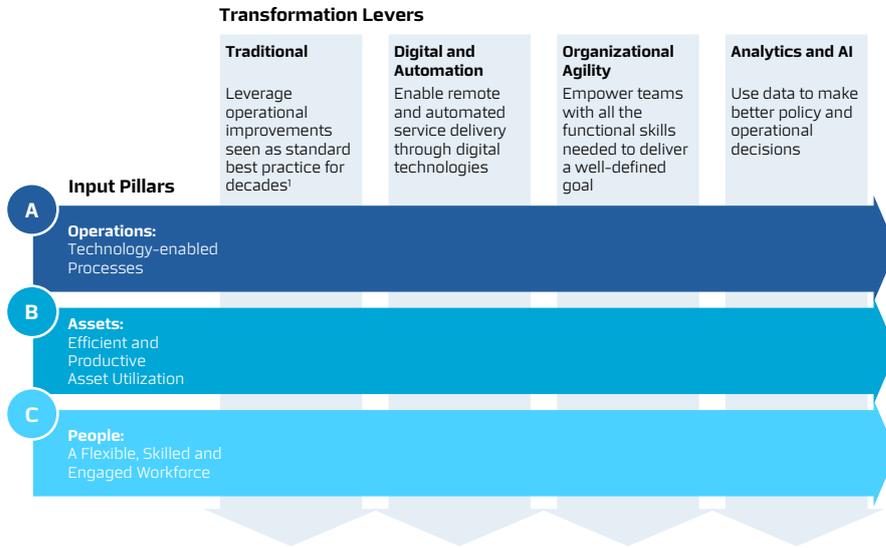
In our study, we have looked at the economies of eight Middle Eastern countries—Bahrain, Egypt, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, and United Arab Emirates—to assess productivity gaps and the potential impact of government-productivity-enhancing interventions.

As described in the previous chapter, productivity gains are convertible into either saving gains related to lower government spend or improved outcomes, where better results are achieved with the same resources. To enable a comparison between the gains of different sectors, we chose to keep all gains in monetary values.

Governments can work on increasing productivity by transforming their spending (input) pillars using different transformation levers (Exhibit 3). We have organized government spending into three pillars—operations, assets, and people—and transformation levers into four categories—traditional, digitization and automation, organizational agility, and analytics and AI.

Exhibit 3:

Government Productivity Enhancement Can Be Achieved By Transforming Three Spending Pillars Across Four Potential Levers.



1. For example, upskilling, lean, centralization of procurement, organizational modernization

We have developed a model to calculate productivity gains, which can be interpreted as potential for savings or boosting outcomes. The model allowed us to estimate productivity gains by productivity pillar (operations, assets, and people) and by productivity lever (traditional, digital and automation, organizational agility, and analytics and AI). As productivity potential can differ by sector, our model provides results for the total economy as well as for six economic sectors, including education, health and social development, municipal services, economic affairs, infrastructure and transportation, and public administration.

Our estimates take into account each country’s yearly budget data split across sectors and categories of spend which indicate the baseline. As public data did not have all the necessary splits for all countries, we leverage the averages of countries for which data was available to produce the necessary data splits for the others, while ensuring consistency with their own available data.

Assumptions are lever specific and apply a certain percentage of productivity gains to a relevant sector and pillar budget lines, for example, people in education, assets in health, or processes in municipal services. Just to provide a few examples, an assumption for traditional levers is a decrease on procurement spending from streamlining and consolidating procurement. For digital and automation, assumptions for estimating current automation potential by sector include a percentage of processes that can be automated in each sector. The assumptions to calculate intervention impact by lever are taken from real-world case studies³⁸ and academic research and are validated by McKinsey experts.

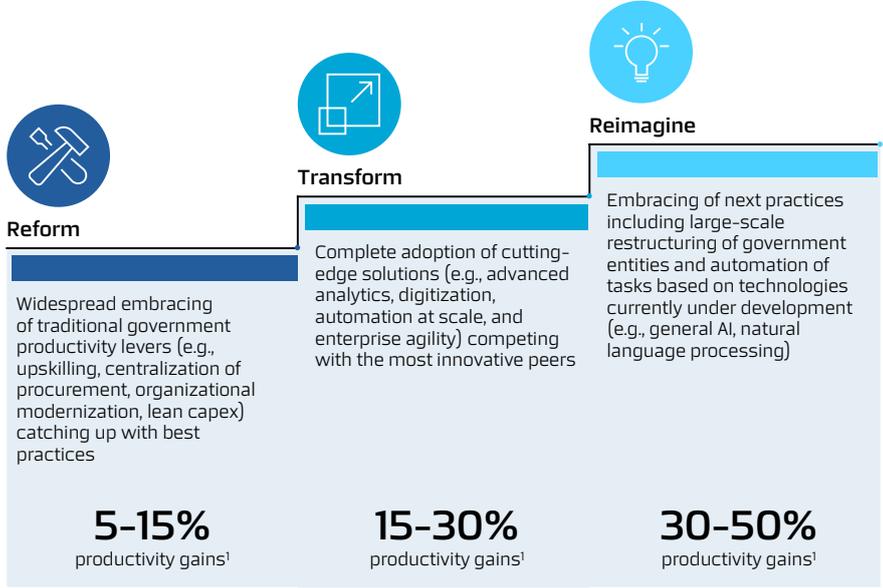
38 The example sources include government websites, international organizations such as IMF, ILO, ONZ, research institutes such as Gallup, Pew Research Center, Harvard Business Review, and McKinsey Global Institute reports.

Based on our analysis, Middle Eastern governments have a sizable opportunity to boost productivity across government organizations in the region. Our research shows that there is a significant productivity gap when compared with other countries, ranging from 17% to 60%, depending on the country and sector as well as the reference countries.

Governments can work on reducing productivity gaps by introducing various interventions, but their type and scale are typically determined by governments' ambitions regarding transformation and goals they want to achieve. We identify three productivity potential horizons under which governments refine existing structures, transform existing structures, or reimagine those structures (Exhibit 4).

High-level estimates suggest Middle Eastern governments could increase productivity by 15 to 30% through a mix of traditional and cutting-edge solutions.

Exhibit 4:
Potential For Improvement Depends On The Level Of Ambition Of Government Transformation.

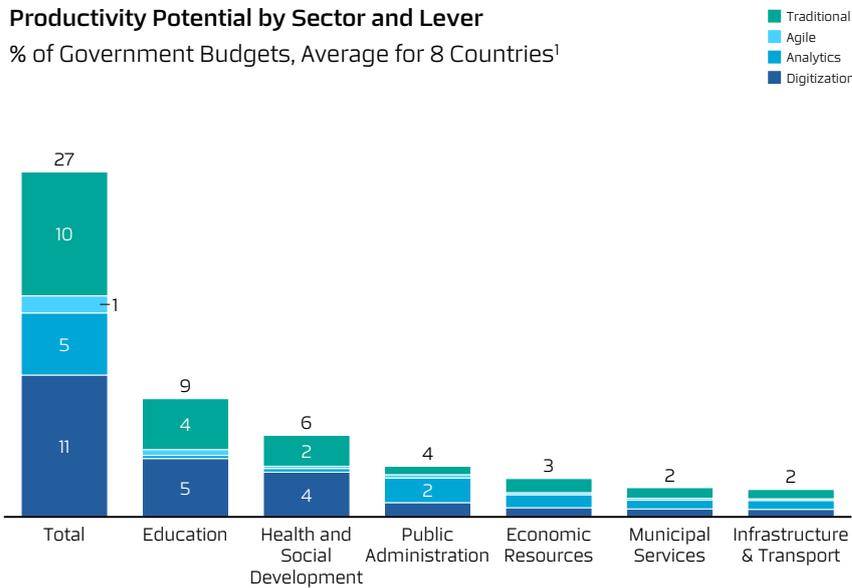


1. Either through quality increases or efficiency gains. Typical parameters; concrete potential to depend on level of existing inefficiencies and spending mix

Our research showed that the introduction of traditional productivity levers (for example, upskilling, procurement centralization) could bring productivity gains of 7 to 13%. Additionally, cutting-edge solutions (for example, Advanced Analytics, digitization) could boost productivity up to 33%. On top of that, large-scale structural programs expected to reach maturity in the coming decade could see government productivity gains reach up to 49%.

Even without reimagining existing structures, productivity gains could be equivalent to roughly 27% of budget (Exhibit 5). Most of these gains come in education, health and social development, in part because these are also some of the largest spending categories of most governments. The most important levers are different in different sectors. For example, analytics is key in public administration and economic resources, but small in fields like education and health.

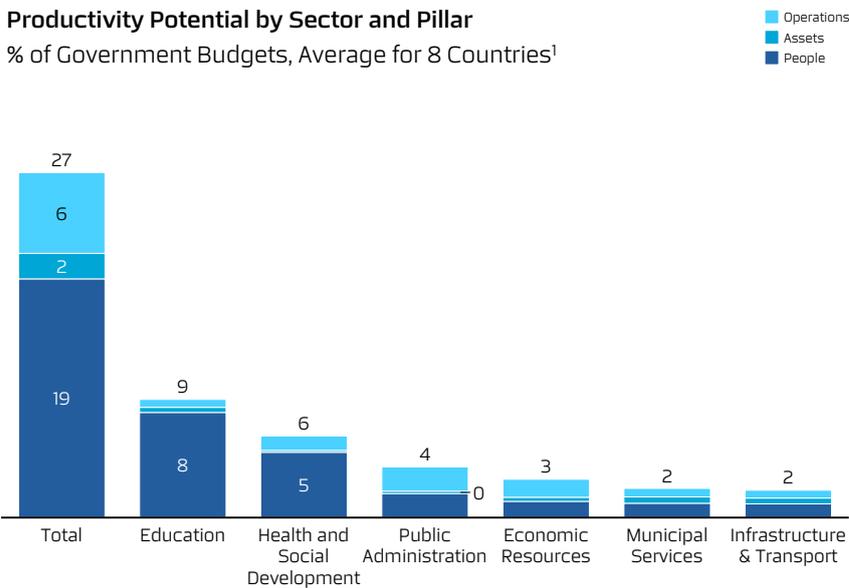
Exhibit 5:
Even Without Reimagining Existing Structures, Productivity Gains In Middle Eastern Countries Could Be Equivalent To 27% Of Government Budgets.



¹ Bahrain, Egypt, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, and United Arab Emirates
 Note: Figures may not sum, because of rounding; calculation based on national budget data

We also see that roughly 70% of productivity gains are associated with spending on people, with assets playing a relatively small role across most sectors (Exhibit 6). The exception to this is municipal services and infrastructure and transportation—two very capex-heavy sectors.

Exhibit 6:
The Bulk Of Productivity Gains Are Associated With Spending On People.



¹ Bahrain, Egypt, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, and United Arab Emirates
 Note: Figures may not sum, because of rounding; calculation based on national budget data

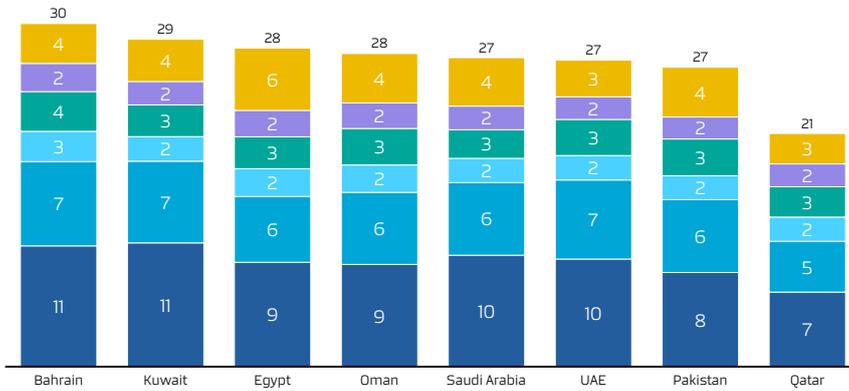
While different sectors have similar contributions to productivity potential across countries, differences in spending mix translate into differences in total potential across countries. For example, Egypt’s large share of spending on public administration translates into a contribution potential that is twice as large as that of countries like the United Arab Emirates or Qatar (Exhibit 7).

Exhibit 7:

Differences In Spending Mix Translate Into Differences In Total Potential Across Countries.

Productivity Potential by Country and Sector

% of Government Budgets



Note: Figures may not sum, because of rounding; calculation based on national budget data

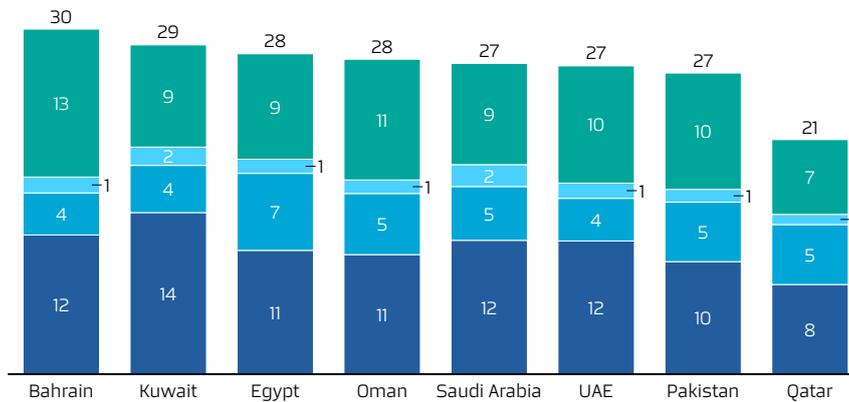
A similar logic explains differences in the role played by different transformation levers across countries, with digitization and traditional levers generating the highest productivity gains across the region (Exhibit 8). The large difference in the savings potential in Qatar comes from the higher levels of public spending on major infrastructure projects in recent years (for example, Lusail City, New Doha Port, Al Khor Stadium, Hamad International Airport, Qatar Integrated Rail, Ashghal Expressway Program, and Mshereib Downtown Doha).

Exhibit 8:

Digitization And Traditional Levers Generate The Highest Productivity Gains Across The Region.

Productivity Potential by Country and Lever

% of Government Budgets



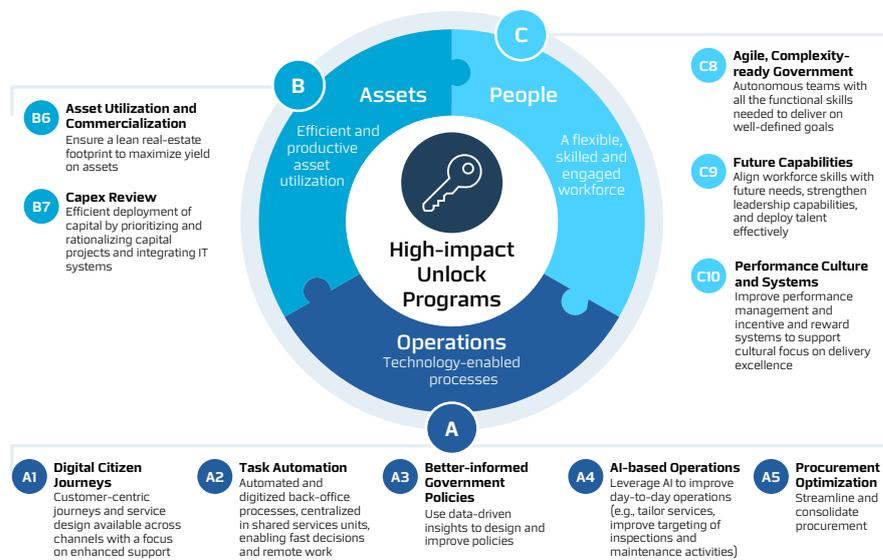
Note: Figures may not sum, because of rounding; calculation based on national budget data

Identifying Ten High-Impact Programs to Unlock Productivity

The potential for improvement is big, and sizing the productivity opportunity is the first step in thinking about introducing transformations, but to capture this potential governments need to identify and introduce the right interventions that will be applicable locally and will contribute to the government strategy.

There are many productivity-enhancing measures, but through our research we have found ten potential high-impact unlock programs under which these measures would typically fall (Exhibit 9).

Exhibit 9:
Priority Interventions Can Be Clustered Into Ten High-Impact Unlock Programs.



A. Technology-enabled Processes

Discussions about improving government productivity often focus on the need to improve government operations. Public institutions are often perceived as organizations with slower processes and lag behind in adopting technology compared with the private sector. A few ways that they can improve productivity include adopting new technologies or new approaches and improving current methods and skills. Making processes digital and lean should be the primary objective. Improved processes increase productivity, improve quality of services, and increase customer satisfaction. Finally, the lean approach can use less space, cost less, and take less time to deliver services compared with a traditional approach. Digitization can deliver a better customer experience through personalization and convenience.

A1. Digital Citizen Journeys

Developing customer-centric journeys and service design available across channels can successfully improve government operations and perception. The customer journey approach may also become the element of empowering the front line and continual improvement process in government services.

Private-sector organizations typically manage just a few customer journeys. Governments, however, are responsible for 50 to 100 journeys, which account for thousands of individual services.³⁹

Citizen journeys connect individual government services from a user or citizen perspective. They typically comprise several services, mostly within one thematic field, but also cutting across different thematic fields and departments. To group services effectively, a deep understanding of service connections is required, but when well done, they can serve as a basis to identify harmonization potential within and across user journeys based on understanding of the individual services and the connections between them.

By understanding the typical service catalog as well as the current state of digitization, governments can identify the key user journeys and understand the process to find harmonization potential within and across user journeys based on understanding of the individual services, ensure user focus during implementation, and focus the digitization effort on the user perspective.

The process should start with defining a clear customer-experience strategy to enable consistency and convenience across communication channels. Governments can harness big data and use automated customer feedback tools (such as NPS score) for key insights on customer pain points, automate customer query response (for example, AI-enabled chat bots) to address those pain points, leverage natural language processing to provide real-time coaching to agents, and use behavioral psychology to manage customer expectations. The other solutions would include continuous improvements through adoption of zero-based designed thinking in redesigning customer-facing processes by removing many of the self-imposed barriers to achieve desired results⁴⁰ and Minimum Viable Product (MVP)-based approach allowing to launch solutions which are for example not fully automatized yet, but have enough features to be usable by customers who can then provide feedback for future improvements⁴¹ (Exhibit 10).

Exhibit 10:
Eight Practices Can Help Governments Craft Customer-Centric Journeys.



There are examples of governments that adopted a customer-journey approach when designing or rebuilding their public services. They often take the form of the one-stop shop for all customer-facing activities which are grouped and structured in one place, such as an online portal or mobile app.

40 Charles-Henri Marque, Rohit Panikkar, and Sai Tunuguntla, "Unlocking enterprise efficiencies through zero-based design," June 2020, McKinsey.com.

41 Mason Adair, "Agile Commercialization: Why your product manager should close your first customer," McKinsey Digital, April 2018, medium.com.

In Germany, the government is on track to digitize virtually all 5,900 transactions handled by public entities by 2022. Different ministries and regions were then given the task of digitizing these services, leading to roughly 50% less time spent interacting with the public administration and about 50% lower costs for companies. It is estimated that the digitization of the 30 most important services alone enabled annual savings of €1 billion.⁴²

In Australia, the government established a start-up to lead the creation of a digital one-stop shop integrating all citizen-facing journeys. It was delivered in six months and scaled up over five years to handle more than 50 million transactions per year. As a result, the government reached 97% customer satisfaction, up from 60% previously.⁴³

In Canada, the government of British Columbia launched an application that is capable of answering 10,000 questions on 16 services. The application uses an AI platform that was initially trained on more than 3,000 documents.⁴⁴

To structure the service digitization effort, Dubai grouped around 1,600 government services into two user groups (840 services for individuals and 720 services for businesses) and then into 13 life aspects, including eight life aspects relevant for individuals (education, entertainment, family, moving, transportation, property, well-being, and work), and five for businesses (property and assets, legal, setup and expansion, marketing and sales, and human resources). Responsibility for digitization was split across various entities in line with their general service portfolios.⁴⁵

A2. Task Automation

Digitizing services helps governments meet public expectations and become more efficient and resilient. They give citizens 24/7 access to public services, save their time by around 50% on interactions with public administration, and allow companies to save more than 50% on those interactions. Public-sector employees also stand to benefit, as they would be freed from repetitive tasks, which are particularly suitable for automation, to focus on more creative activities.⁴⁶

Around 37% of government jobs across Middle East countries are automatable with current technology, according to research by the McKinsey Global Institute⁴⁷. Automation potential varies by occupation and depends on time typically spent by employees on various activities. Back-office activities with the highest automation potential are those that involve data processing and data collection (Exhibit 11).⁴⁸

42 Matthias Daub, Axel Domeyer, Abdulkader Lamaa, and Frauke Renz, "Digital public services: How to achieve fast transformation at scale," July 2020, McKinsey.com.

43 Rachna Gandhi, "Building a one-stop shop for government services in Australia," December 13, 2018, McKinsey.com.

44 Hila Mehr, "Artificial intelligence for citizen services and government," Ash Center for Democratic Governance and Innovation, Harvard Kennedy School, August 2017, ash.harvard.edu.

45 Smart Dubai, "About us," smartdubai.ae.

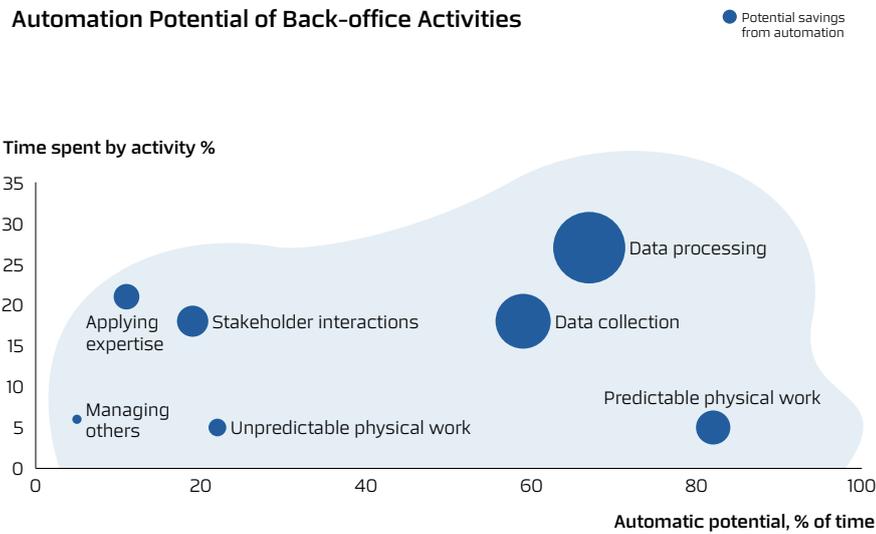
46 Matthias Daub, Axel Domeyer, Abdulkader Lamaa, and Frauke Renz, "Digital public services: How to achieve fast transformation at scale," July 2020, McKinsey.com.

47 Jan Peter aus dem Moore, Vinay Chadran, Jorg Schubert, "Future of Jobs in the Middle East", January 2018, McKinsey.com.

48 James Manyika, Michael Chui, Mehdi Miremadi, Jacques Bughin, Katy George, Paul Willmott, Martin Dewhurst, "A future that works: Automation, employment, and productivity," McKinsey Global Institute, January 2017, McKinsey.com.

Exhibit 11:

Data Processing And Collection Have The Highest Automation Potential Of Back-Office Activities.



Source: Susan Lund, Anu Madgavkar, James Manyika, Sven Smit, Kweilin Ellingrud, Mary Meaney, and Olivia Robinson, "A future that works: automation, employment, and productivity," January 2017, McKinsey.com

Public authorities cannot build great digital services on their own; they need national governments to provide the right conditions for them to succeed. Our research and global experience with digital transformations in the public sector suggests five core tasks can help national governments encourage the launch and uptake of digital public services. They can set an overarching digital strategy and targets, provide common IT platforms, define technical standards, facilitate change through legislation, and underwrite and support pilot projects that would allow public authorities to build necessary digital skills.⁴⁹

Digital governments automate processes for high-volume, repetitive, rule-based activities and move away from paperwork to digital formats. The Smart Dubai Office is overseeing Dubai's goal of becoming a fully paperless government with all internal processes and customer-facing services digitized starting in 2021. As part of this transition process, the government focuses on implementing the necessary technology to enable paper-free transactions. They will also create a legal framework to address digital procedures and will overcome any cultural and customary barriers in the move away from paper.⁵⁰

Governments also establish shared service centers to reduce costs through increased scale and expertise. They map end-to-end processes and integrate back-office processes centralized in shared services units through an enterprise resource planning system.

49 Matthias Daub, Axel Domeyer, Julia Klier, and Martin Lundqvist, "Digitizing the state: Five tasks for national governments," November 2017, McKinsey.com.

50 Smart Dubai, "About us," smartdubai.ae.

All of these interventions save time and allow for more nimble decision making. In Germany, automated processing contributed to around 60% less case-handling effort at the country's National Regulatory Control Council.⁵¹

Sometimes introducing digital processes requires taking a more creative or broader approach, such as amending an existing law. Denmark amended its tax laws to facilitate the creation of an algorithm for classifying newly registered businesses. More than 98% of tasks involved in registering new companies were able to be automated.⁵²

Digital transformations may speed up under crisis situations. The outbreak of COVID-19 has imposed on governments tremendous pressure to introduce new ways of working. The UK healthcare system has seen years of digital evolution take place within weeks. In 2019, majority of appointments took place in person, and less than 1% were carried out remotely via video link. During pandemic doctors have assessed 100% of patients by phone, with only about 7% proceeding to face-to-face consultations. Now the government considers ways of locking in this progress after the pandemic.⁵³

It is predicted that some forms of remote work may continue after COVID-19, although this will require many shifts, including investment in digital infrastructure, reinventing some processes and policies, and freeing up office space.

The McKinsey Global Institute analyzed 2,000 tasks, 800 jobs, and nine countries to determine the overall potential for remote work among jobs and sectors⁵⁴. Finance and insurance have the highest potential, with three-quarters of time spent on activities that can be done remotely without a loss of productivity. Government and administrative support staff could work remotely around one-third of the time without a loss of productivity. In education, employees could spend one-third of their time on remote activities and fulfil their duties without in-person contact without loss of productivity; workers in healthcare and social assistance could perform 20% of their jobs remotely.⁵⁵

Additionally, the first customer surveys show that remote work may have a positive impact on productivity. Some 41% of employees who responded to a McKinsey consumer survey in May 2020 said they were more productive working remotely than in the office⁵⁶. As employees have gained experience working remotely during the pandemic, their confidence in their productivity has grown, with the number of people saying they worked more productively increasing by 45% from April to May 2020. Also, more employers are seeing somewhat better productivity from their remote workers after nine months working under that model.⁵⁷

51 Matthias Daub, Axel Domeyer, Abdulkader Lamaa, and Frauke Renz, "Digital public services: How to achieve fast transformation at scale," July 2020, McKinsey.com.

52 Troy Bare, "4 Powerful Benefits of Paperless Processes", Simpligov Blog, June 2018, simpligov.com.

53 Sapana Agrawal, Aaron De Smet, Sébastien Lacroix, and Angelika Reich, "To emerge stronger from the COVID-19 crisis, companies should start reskilling their workforces now", May 2020, McKinsey.com.

54 The effective potential includes only those activities that can be done remotely without losing effectiveness.

55 Susan Lund, Anu Madgavkar, James Manyika, and Sven Smit, "What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries," McKinsey Global Institute, November 23, 2020, McKinsey.com.

56 Ibid.

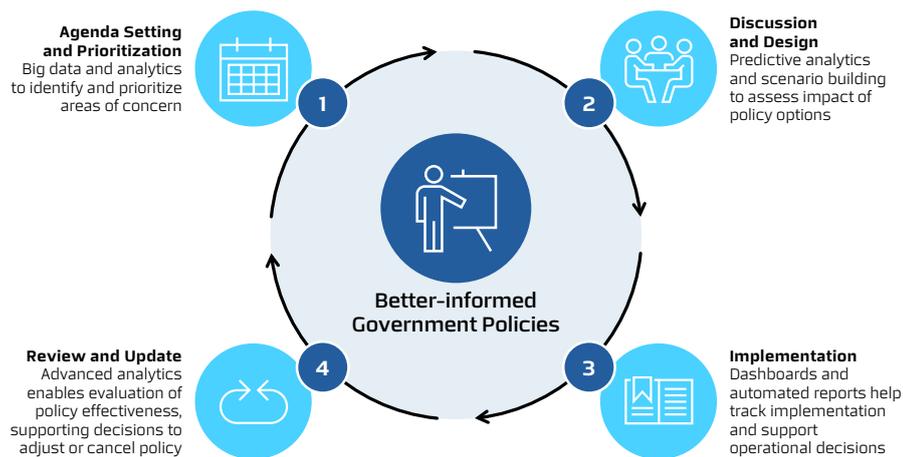
57 Ibid.

A3. Better-informed Government Policies

While there will always be a certain degree of subjectivity and uncertainty around policy-making, governments can take steps to understand and quantify the trade-offs between different decisions and seek to make better informed ones.

Making better-informed decisions requires using an evidence-based, data-driven approach at all stages of the policy cycle.

Exhibit 12:
Four Practices Allow For Better-Informed Policy Making.



The possible solutions would include enabling digital platform for transparent performance management and adopt outcome-based performance management. Governments can also use nowcasting dashboards of economic sector performance and big data and Internet of Things (IoT) in decision making (for example, new services to provide and automation of tasks).

The U.S. Securities and Exchange Commission developed a dashboard of around 200 metrics to detect anomalous patterns in financial reporting. The tool is trained on historical data and uses a random forest model to predict possible misconduct, improving targeting of inspections.⁵⁸

A large US healthcare regulator is employing supercomputing to build a database that houses information on segments of the population for a genome-mapping project. Participation is voluntary and data is aggregated and anonymized. The country aims to construct a system that will allow it to build targeted patient groups. Then doctors will be able to use this biological data over time to better diagnose and treat people with different disease profiles⁵⁹. Advanced technologies can also serve other purposes in healthcare—for instance, to provide personalized care and tailored treatment plans that consider each patient’s characteristics and needs. This approach can help reduce the risk of drug side effects. Other sectors, such as digital advertising (adtech), have already implemented such large-scale personalization efforts, individually predicting interest patterns and buying behavior.⁶⁰

58 David Freeman Engstrom, Daniel E. Ho, Catherine M. Sharkey, and Mariano-Florentino Cuéllar, “Government by algorithm: Artificial intelligence in federal administrative agencies,” Report submitted to the Administrative Conference of the United States, January 2020.

59 National Institutes of Health, “All of Us Research Program”, Researchallofus.org.

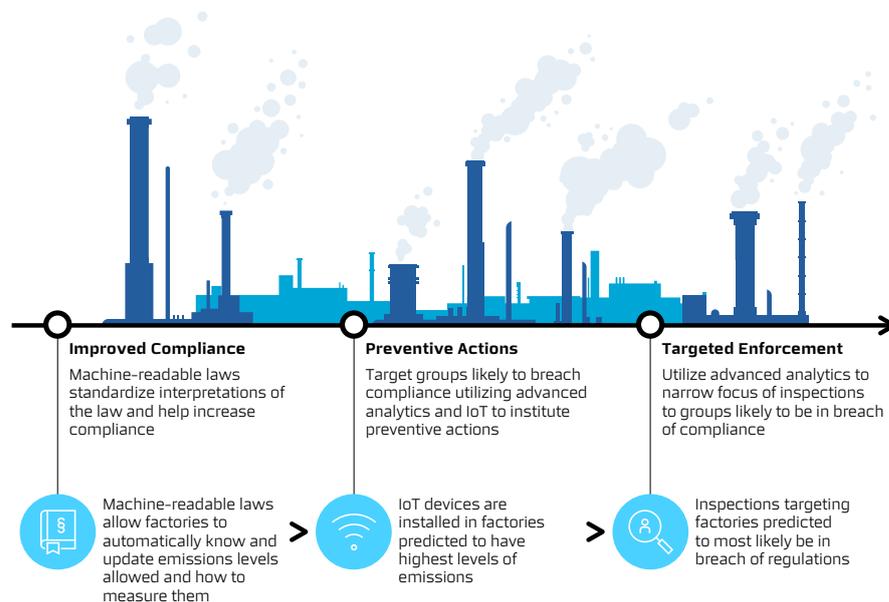
60 Jannik Podlesny, Henning Soller, and Marvin Wenzel, “The power of emerging technologies: Finding value through data,” July 21, 2020, McKinsey.com.

A4. AI-based Operations

AI could transform how government agencies work, allowing them to reduce the cost of core governance functions, improve the quality of decisions, and unleash the power of administrative data—ultimately making government more efficient and effective. In the United States, 45% of federal agencies have experimented with AI and related machine-learning tools.⁶¹

Indeed, governments can leverage AI to improve day-to-day operations (Exhibit 13). Other applications of AI in the public sector include utilizing machine-readable laws for better compliance, using data-driven predictions of compliance breaches to apply preventive interventions, using augmented reality for offsite maintenance, enabling digital inspection and assurance (for example, IoT, image processing, and fraud detection), and adopting AI platforms for predictive maintenance to prevent machine breakdown and reduce unscheduled downtime in public transport.

Exhibit 13:
AI Can Be Harnessed to Improve Everyday Operations.



The benefits from using predictive and advanced analytics in the public sector may include reducing improper payments, increasing revenue from tax compliance, and improving policy outcomes and tracking.⁶²

Overall, the US federal government is estimated to lose \$150 billion every year in fraud, waste, and abuse (FWA), which is equivalent to 4% of the budget⁶³. The Securities and Exchange Commission has developed Corporate Issuer Risk Assessment, a dashboard of around 200 metrics that are used to detect anomalous patterns in financial reporting of corporate issuers of securities for further investigation. This tool is trained on a historical data set and uses a random forest model to predict possible misconduct. Capturing fraudulent payments and budgets losses is important for both ensuring a well-functioning government and maintaining public trust.

61 David Freeman Engstrom, Daniel E. Ho, Catherine M. Sharkey, and Mariano-Florentino Cuéllar, "Government by algorithm: Artificial intelligence in federal administrative agencies," Report submitted to the Administrative Conference of the United States, January 2020.

62 Bjarne Corydon, Richard Dobbs, David Fine, Tera Allas, Andrea Berchowitz, Eoin Daly, Jonathan Dimson, Rajat Gupta, Jonathan Woetzel, and Richard Higgins, "The opportunity in government productivity," McKinsey Center for Government, April 18, 2017, McKinsey.com.

63 Susan Cunningham, Mark McMillan, Sara O'Rourke, and Eric Schweikert, "Cracking down on government fraud with data analytics," October 15, 2018, McKinsey.com.

Identifying FWA through analytics-led efforts may allow governments to introduce low-cost interventions. In Australia, the Department of Health has seen a 20% reduction in urgent after-hours Medicare billing by using analytics. These analytics have identified 1,200 high-claiming doctors, and the department sent them letters to “voluntarily acknowledge” incorrect claiming of urgent items, encouraging them to switch from claiming urgent items to standard items. This effort has saved the federal government about \$12 million.⁶⁴

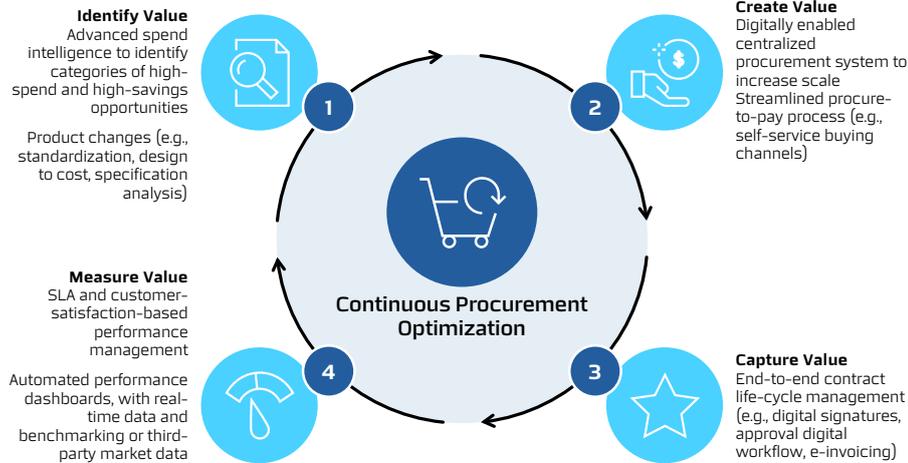
Also in Australia, railroad companies have used AI to cleanse data, merge sources, and perform live data analysis. Thirty percent savings were achieved in maintenance costs through expanding service intervals and condition-based maintenance.⁶⁵

A5. Procurement Optimization

Economically, public procurement is recognized as a tool to improve the efficiency and effectiveness of public spending. But because it applies to thousands of transactions linked to the purchase of goods, services, and works by governments and state-owned enterprises, it is a significant position in government operations. Public procurement represents 12.6% of GDP in OECD countries - ranging from 4.7 % in Mexico to 19.6% in the Netherlands.⁶⁶

Streamlining and consolidating procurement can significantly increase government productivity (Exhibit 14).

Exhibit 14:
Continuous Procurement Optimization Involves Identifying, Creating, Capturing, and Measuring Value.



Traditional ways of improving procurement include encouraging bulk orders to leverage economies of scale, renegotiating contract pricing based on supplier cost clean sheet and quality, and designing or revising procurement approval policy to minimize waste.

Significant effects can be achieved through centralizing and digitizing procurement systems and digitizing the contract life-cycle management (for example, digital authoring and signature and management including AI compliance management) and automating purchase order requests for duplication avoidance.

64 Susan Cunningham, Mark McMillan, Sara O'Rourke, and Eric Schweikert, "Cracking down on government fraud with data analytics," October 15, 2018, McKinsey.com.
 65 "Railigent - the solution to manage assets smarter: on the way to 100% availability", Siemens, siemens.com
 66 OECD, "Government at a Glance 2021," 2021, oecd-ilibrary.org.

Finally, governments can increase collaboration between procurement and other departments to drive design to cost mindset and integrate purchasing into strategic planning and strategic management.

Other interventions may include implementing a supplier performance-management system through SLA, implementing quality checks and customer satisfaction, streamlining procure-to-pay processes through self-service buying channels, or conducting a supplier X-ray (for example, multi-tier supplier insight monitor for qualification, selection, risk management, and negotiation).

Estonia's Shared Service Center provides nationwide financial, human resources, and payroll accounting services to most public-sector agencies. Moving forward, it aims to conduct all public procurement in Estonia as the centralized model of support services seems to be working well. A \$2 million annual reduction in state costs was achieved together with a 20% increase in procurement process efficiency.⁶⁷

B. Efficient and Productive Asset Utilization

Interventions to increase productivity of government assets can be introduced on two fronts. The first relates to commercialization and better utilization of real estate under government ownership. As our research shows, this can bring about savings on real-estate costs that government covers. The second action governments can take includes conducting capital-expenditure reviews, which can support efficient deployment of capital by prioritizing and rationalizing capital projects and integrating IT systems.

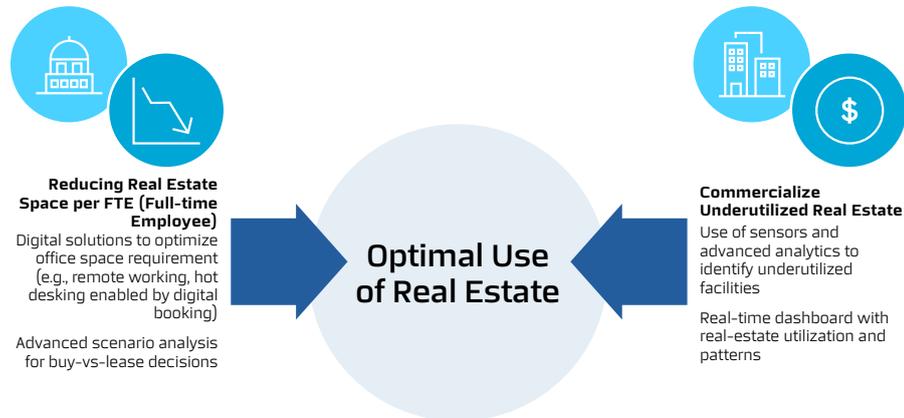
B6. Asset Utilization and Commercialization

Optimal use of government real estate can be supported by the following two actions (Exhibit 15):

1. Reducing real-estate space per full-time equivalent, which can be achieved by introducing digital solutions to optimize office space requirements (for example, remote working and hot desking enabled by digital booking), harnessing the digital marketplace for readily available real estate, and employing advanced scenario analysis for buy-versus-lease decisions.
2. Commercializing underutilized real estate, which can be achieved by using sensors and advanced analytics to identify underutilized facilities and a real-time dashboard with real-estate utilization and patterns.

Exhibit 15:

Two Actions Can Help Governments Achieve Optimal Use of Real Estate.



According to the UK government’s Estate Strategy, “the Government is committed to creating an effective and efficient government estate, which provides value for money for the taxpayer, reduces our environmental impact, transforms the way civil servants work and contributes to the growth agenda”⁶⁸. The Office of Government Property (OGP), formerly the Government Property Unit, supports government and the wider public sector to manage their estate more efficiently and effectively. Since its establishment in 2010, the size of the estate has fallen by more than 25%, more than £1 billion in annual costs have been saved, and the average space that a civil servant uses in government offices has reduced by 5% compared with the 2015–16 figure—and is significantly below that of the private sector. It has also overseen the collection of more than £3 billion capital receipts from the sale of surplus land and property.⁶⁹

B7. Capex Review

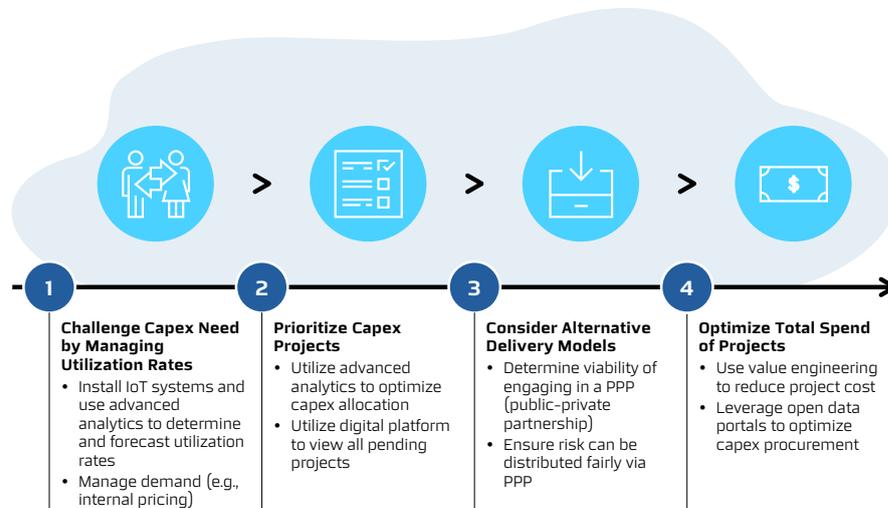
Capital expenditures are a necessary part of every business, including governments. Capital-investment performance can have an enormous impact on an organization’s value, and it can drive growth and increase overall returns on invested capital. Capex review can improve government performance by reducing budget overruns and point to losses throughout the execution of capex. Examining how spending is distributed at a high level can help isolate areas for improvement. Capex review processes shall consist of four steps (Exhibit 16).

68 “Government Estate Strategy: Better Estate, Better Services, Better Government,” Office of Government Property, July 2018, gov.uk.

69 Office of Government Property (OGP), gov.uk.

Exhibit 16:

Capex Review Processes Comprise Four Steps.



The concrete solutions governments can introduce include centralizing data management through enterprise data centers, leasing equipment instead of purchasing, off-loading underperforming assets or entities, and designing guidelines for expansion of entity scope prior to establishing new entities.

Interventions harnessing technologies include submitting projects, scrubbing business cases and prioritizing portfolios through digital platform, optimizing capital projects through value engineering solutions (for example, design to value), leveraging digitally enabled sharing platforms for assets to enhance use, harnessing APIs for increased speed and agility, implementing a stage-gate process for investment decisions through a digital platform, leveraging a digitally enabled sharing platform for vehicles to enhance use, and using open-data portals to optimize capex procurement.

Game changers would include merging entities with overlapping or complementary mandates, launching a public-private partnership program leveraging private-sector expertise, and integrating IT infrastructure on the cloud.

Transport Canada, Canada's federal transportation agency, is using Iteris advanced traffic data analytics and visualization platform, leveraging advanced diagnostics capabilities to support the countrywide transportation system's performance. Insights from analytics enable Transport Canada to optimize capex decisions based on real-time transportation infrastructure use.⁷⁰

C. Flexible, Skilled and Engaged Workforce

There is no doubt that employees' performance and engagement affect productivity at every level of the organization. Organizations need to motivate employees but also provide them with all the necessary tools to support them in their jobs. Thinking about future capabilities is key to align workforce skills with future needs, strengthen leadership capabilities, and deploy talent effectively. As our research shows, development of new capabilities can lead to growth in employee productivity. Designing agile, cross-functional task forces and autonomous teams with all the functional skills needed to deliver well-defined goals can decrease time to market. Finally, developing a performance culture can improve performance management to support cultural focus on delivery excellence.

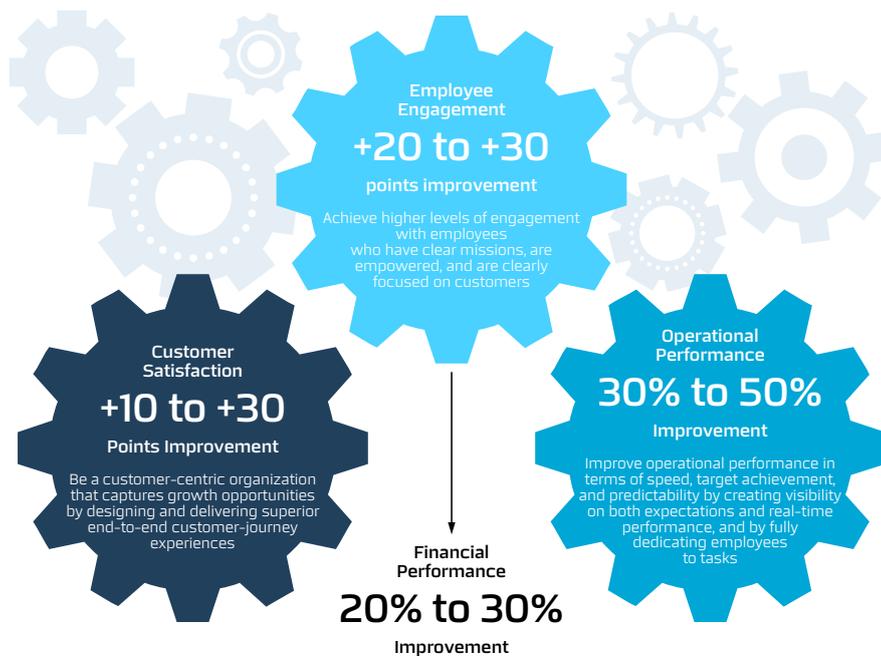
C8. Agile, Complexity-ready Government

Agile' refers to a working model used by organizations to increase their ability to succeed in quickly evolving environments. This model involves the implementation of different 23 practices, including rapid iteration and experimentation, standardized ways of working, information transparency, role mobility, flexible resource allocation, clear flat structure, open physical and virtual environment.⁷¹

Application of agile practices to government operations can help achieve productivity through increased collaboration and responsiveness to customer enquiries. It also reduces bureaucracy and eliminates middle-management ranks.

As McKinsey analysis showed,⁷² implementing an agile transformation can improve operational-performance metrics by 30 to 50% (analyses of the impact of enterprise-wide agile transformations in 22 organizations in six sectors) (Exhibit 17). Other outcomes of agile transformations are improved customer satisfaction, employee engagement, and financial performance.

Exhibit 17:
Agility Can Improve Performance Across Four Areas.



Operational-performance metrics vary by sector, but common examples include time to market, planning time, issue-resolution speed, and predictability, which can fit broadly into three categories: speed, target-achievement rates (TARs), and other industry-specific metrics.

Using agility, organizations can increase the speed of decisions and product development, as well as shorten the time between the conception and release of a product. In service operations, speed can drive significant gains in productivity and customer satisfaction, as we have seen in many instances of agile transformations of customer-service and back-office activities.

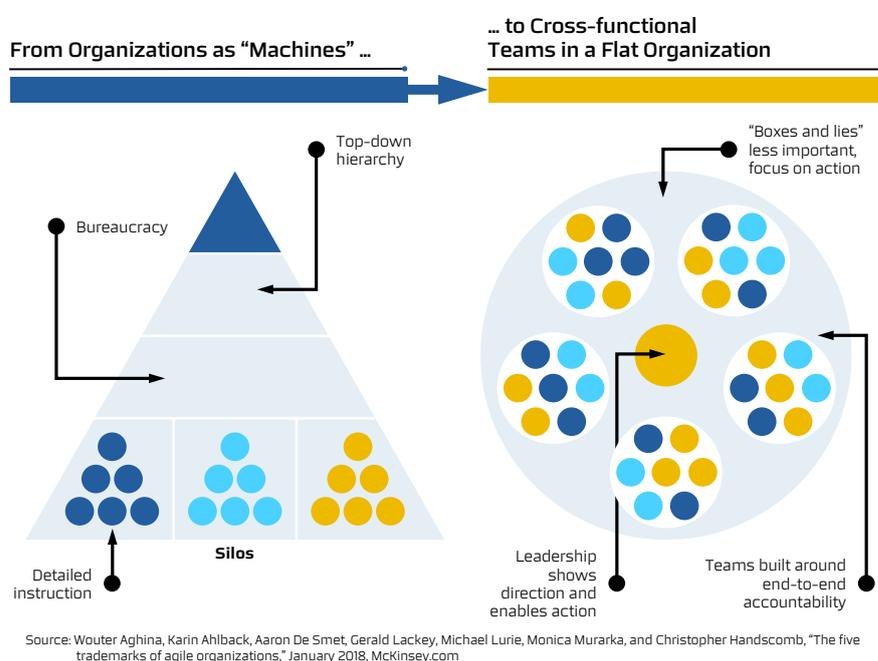
71 Wouter Aghina, Karin Ahlback, Aaron De Smet, Gerald Lackey, Michael Lurie, Monica Murarka, and Christopher Handscomb, "The five trademarks of agile organizations", 2018, mckinsey.com

72 Wouter Aghina, Christopher Handscomb, Jesper Ludolph, Daniel Rona, and Dave West, "Enterprise agility: Buzz or business impact?", 2020, McKinsey.com

Agility can also lead to performance improvement what can be illustrated by many industry-specific operational metrics. One of the examples comes from an Australian liquefied natural gas producer for which increasing the amount of gas produced per employee was a key operational metric. After the company applied agile methodologies, such as shifting technical middle managers to “doers” and creating semiautonomous operating assets, it was able to raise overall gas production by 5 to 10%.⁷³

To transform traditional organizational structures, governments should introduce a program to delayer the organization, or achieve a flat organization, and design employee business-continuity processes (Exhibit 18). Employees should be provided with alternative career paths such as horizontal moves and agile roles.⁷⁴

Exhibit 18:
Flat Organizations Are More Agile.



For performance management, governments should consider defining clear objectives and key results for teams and individuals, conducting team-level performance management, conducting periodic cross-department meetings and common status updates, and conducting quarterly business reviews for budgeting update purposes.

Cutting-edge interventions include: encouraging organization-wide collaboration and communication tools, embedding agile ways of working in teams, and designing agile cross-functional task forces including centers of excellence.

The government of Malaysia created an agile delivery unit with a mix of public- and private-sector talent to support its transformation. PEMANDU focus is to support implementation of high-level strategic priorities of the government broken down into concrete interventions across ministries, departments, and agencies. The agile nature of PEMANDU allows end-to-end accountability and quick changes of direction, if needed. The new structure also sped up the implementation of time-sensitive initiatives.⁷⁵

73 Ibid.

74 Wouter Aghina, Karin Ahlback, Aaron De Smet, Gerald Lackey, Michael Lurie, Monica Murarka, and Christopher Handscomb, “The five trademarks of agile organizations”, 2018, mckinsey.com

75 World Bank Group, “Driving Performance from the Center: Malaysia’s Experience with PEMANDU,” April 2017.

C9. Future Capabilities

New technologies can support government leaders in better aligning workforce skills with future needs, strengthening leadership capabilities, and deploying talent effectively.

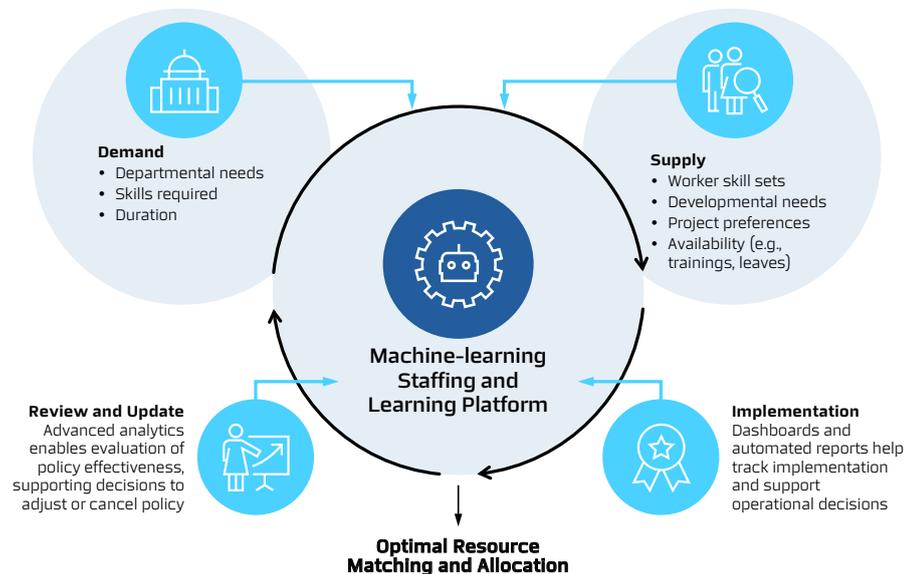
In traditional models, organizations deploy their staff based on the organization's demand and the availability of people, taking into account their skill sets, development goals, and preferences. Sometimes it refers to the backward-looking HR analysis and replicating well-known operating models.

But organizations operate in a dynamic environment, with changing technologies and ways of working. Leaders across industries are adopting new ways of working, particularly in response to the COVID-19 pandemic. Employees across industries must figure out how to adapt to rapidly changing conditions, and companies have to learn how to match those workers to new roles and activities⁷⁶. Now the question becomes, "We have a group of employees capable of doing something today. How can we ensure they're able to do something different tomorrow?" This dynamic is about more than remote working—or the role of automation and AI. It's about how leaders can reskill and upskill the workforce to deliver new business models in the postpandemic era. The answer falls into three categories: redeploying, or moving somebody elsewhere in the company; up-skilling, or taking the essence of what employees do and improving it; and reskilling, training employees in something new.⁷⁷

Organizations can leverage AI and introduce internal machine-learning staffing and learning platforms to optimize team mix and resource allocation, design personal development paths (for example, recommended trainings), implement a talent-exchange platform, and identify and promote future leaders (for example, through rotations and leadership programs) (Exhibit 19).

Exhibit 19:

AI Can Be Used To Match And Allocate Talent With Staffing And Learning Opportunities.



76 Sapana Agrawal, Aaron De Smet, Sébastien Lacroix, and Angelika Reich, "To emerge stronger from the COVID-19 crisis, companies should start reskilling their workforces now," McKinsey, May 2020, McKinsey.com.

77 Bill Schaninger, Bryan Hancock, and Lucia Rahilly, "Today's skills, tomorrow's jobs: How will your team fare in the future of work?," McKinsey, October 2020, McKinsey.com.

McKinsey’s Talent Match application⁷⁸ allows organizations to identify roles critical to driving value and metrics that can be used to track success. It also allows organizations to match talent by assessing the ability of individuals to execute in a role by using objective criteria, determine successors for critical roles.

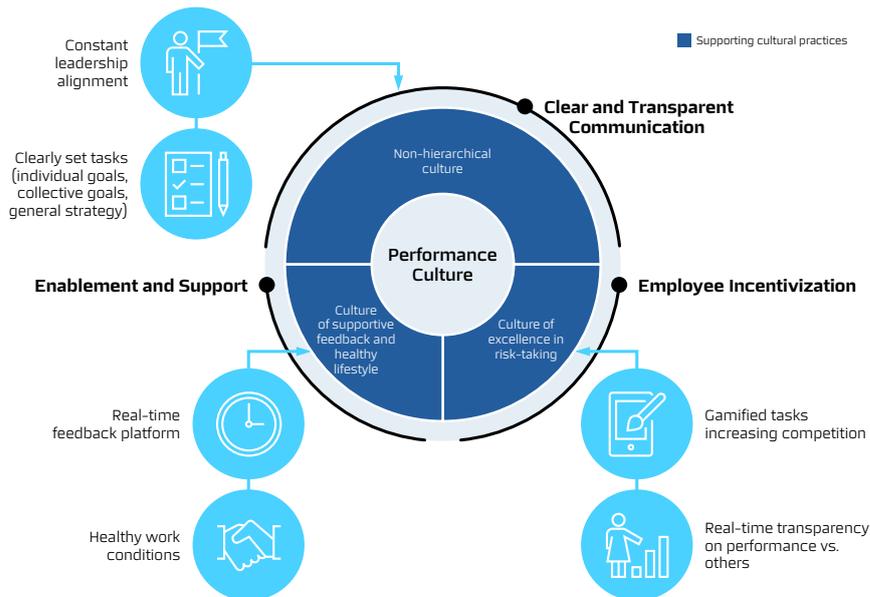
Schneider Electric, a European multinational company employing more than 140,000 people, created a one-stop-shop platform called Open Talent Market for career development of their employees. The AI-driven tool suggests development opportunities for employees based on their skills, competencies, and ambitions, including bi-directional mentoring and learning suggestions—helping to match the supply and demand of talent throughout Schneider Electric. According to the company, the digitization of inner mobility not only supports people development but also helps leaders find diverse talent faster and build teams, guarantees more transparency around available roles and projects, creates networks of expertise throughout the organization, enables greater diversity on teams across the organization, and reduces attrition and turnover.⁷⁹

C10. Performance Culture and Systems

Creating a high-performance culture is fundamental to any productive organization. Companies with strong culture achieve three times higher total return to shareholders than others.⁸⁰

There are three qualities a high-performance culture must consistently demonstrate: clear and transparent communication, employee incentivization, and enablement and support (Exhibit 20). Transparency about individual and collective goals, performance metrics, performance expectations, and evaluation criteria encourages open debate and motivates people to achieve agreed targets. It also requires constant leadership alignment. Employee incentivization may include implementing real-time performance tracking, allowing employees to compare themselves with others, or harnessing various gamified tasks, which can increase competition within teams. Support may include providing employees with a platform for real-time feedback and healthy work conditions.

Exhibit 20:
Three Qualities Are Essential For A High-Performance Culture.



78 Talent Match: Connect talent to value, McKinsey.com

79 "Artificial Intelligence Jobs for the Future," Schneider Electric, November 1, 2019, blog.se.com.

80 Alexander DiLeonardo, Ran Li Phelps, and Brooke Weddle, "Establish a performance culture as your 'secret sauce,'" McKinsey Organization Blog, July 27, 2020, McKinsey.com.

Cutting-edge technology and analytics platforms⁸¹ help organizations understand individual employees' attributes and preferences, personalize content and coaching, rigorously track progress, and get smarter over time as more data is collected. Interventions that help organizations achieve a performance culture in the public sector include enabling digital productivity tracking, introducing a real-time feedback platform, and enhancing and increasing security of a digital setup to enable productive remote working.

Organizations transforming their culture should also consider embedding continuous improvement with a data-driven approach. Traditional culture transformations progress in long phases—first aligning on the aspiration, then designing a plan to achieve it, then tracking progress—which can take years. Leading organizations, on the other hand, use available data to pinpoint high-impact opportunities and agile principles to rapidly iterate and institutionalize advancement. One multinational e-commerce company uses its own data to identify and analyze its most-effective teams' principles, which are then replicated widely. Rather than rely on a central 'culture team,' the company drove change outward.⁸²

One of the examples of the successful adoption of agile working practices and approaches comes from the British Army. The transformation was initiated in the HQ's Directorate of Personnel, which comprises 250 civilian and uniformed employees responsible for the design and delivery of personnel strategy and policy. The aim was to redesign the traditionally hierarchical structure of the army HQ into purpose-based teams through implementation of the structural change and make it more responsive to change, including changing priorities from the government, global events, and rapid technological advancement. It was done by introducing structural changes, changing the way the executives and teams worked with one another, and providing the individual teams with both a new mindset and strong set of practical tools to conduct their work more efficiently. Another success factor was achieving alignment across the organization—working closely with the staff and having the teams themselves colead the transformation.⁸³

In the private sector, Uber uses gamification and incentives to keep drivers engaged and boost performance; these include badges, virtual awards for great performance, and goal-setting, the option for drivers to set earnings goals and notifications when within reach and warning of hypothetical losses when not driving. Gamification has led to lower attrition and increased productivity and motivation.⁸⁴

...

The above ten high-impact unlock programs have been introduced by governments globally with success. While not every country and agency should immediately launch all ten programs, they can provide decision makers with a framework to think about the menu of high-level options.

81 Current solutions in the market include Zymio, Culture Amp, and Leapsome.

82 Alexander DiLeonardo, Ran Li Phelps, and Brooke Weddle, "Establish a performance culture as your 'secret sauce,'" McKinsey Organization Blog, July 27, 2020, McKinsey.com.

83 David Chinn, Jonathan Dimson, Christopher Handscomb, Jesper Ludolph, and Xavier Tang, "Building agility in the British Army's headquarters," October 31, 2019, McKinsey.com.

84 Noam Scheiber, "How Uber uses psychological tricks to push its drivers' buttons," *New York Times*, April 2, 2017, nytimes.com.

Prioritizing High-Impact Productivity Unlock Programs

In the previous chapter we provided a menu of solutions to transform government and increase productivity. However, not all programs are equally important in every context, and transformational programs, in particular, require a high-level commitment from top leadership and significant financial resources. In fact, 84% of all digital transformations fail,⁸⁵ and public sector IT projects are even more likely to suffer from cost and time overruns than private ones.⁸⁶

Starting Points

Due to uncertainties around the potential of different programs, sometimes governments may prioritize interventions based on the political capital of different entities or the brand value of announcing something that sounds “cutting edge” over those that drive the most significant results.

Our analysis of productivity potential for Middle Eastern governments and high-impact unlock programs has revealed five important lessons which can help with prioritization:

1. Focus on Sectors Where Most Gains are Concentrated, such as Education and Healthcare

Governments introducing productivity programs could consider focusing their efforts on sectors with the highest possible gains. As our analysis shows, the highest productivity potential is in the education and health and social development sectors.

The prevalence of these gains is in part explained by the share of budgets represented by these sectors. Healthcare represents between 5 and 8% of Middle Eastern governments’ budgets—lowest in Pakistan and highest in Oman. Meanwhile, education represents between 7 and 25% of governments’ budgets—lowest in Bahrain and highest in Oman.⁸⁷

2. Reskill Government Employees to Enable Redeployment in Areas Less Exposed to Automation

Most of the transformations required to increase government productivity will rely on having people doing their jobs in different ways. This can be done, for example, by adapting to work in agile teams and learn how to develop and work with analytics and AI tools. Given the scarcity of some of these, almost all transformations should include some dimension of capability building.

Yet the greatest need for reskilling is associated with automation. With the job security associated with government jobs in the region, materializing the benefits of large-scale improvements in automation requires the redeployment of workers. If organizations automate a task but in doing so make the person previously doing it idle, they are unlikely to reduce the costs associated with performing the task significantly—and they’re certainly not managing public resources efficiently.

So when a certain task is automated, how can governments redeploy the people performing it? Redeployment programs can take a person-by-person approach, considering the concrete needs of different government entities, the skills of each person, and their willingness to perform different tasks. But in general, a good place to look for places to redeploy these workers is at neglected areas within each sector.

85 Bruce Rogers, “Why 84% of companies fail at digital transformation,” *Forbes*, January 2016, forbes.com.

86 Cem Dilmegani, Bengi Korkmaz, and Martin Lundqvist, “Public-sector digitization: The trillion-dollar challenge,” December 1, 2014, McKinsey.com.

87 “World Health Data Platform,” World Health Organization, who.int; “UIS.Stat,” United Nations Education, Science and Culture Organization, data.uis.unesco.org.

In healthcare, preventive care and mental health are often seen as some of the most neglected areas in the field.⁸⁸ And with the share of elderly people in the region rising, there will likely be opportunities for redeployment in the fields of geriatric care and palliative medicine.

Conversely, in education, the adoption of delivery tools that increase the scale at which classes can effectively happen might decrease the need for professionals teaching large groups but not necessarily for those running smaller tutorials. And they might free teachers up to give more personalized attention to the students that need it, particularly those with special needs.

Reskilling and redeployment is nothing new within the public sector; there's just an opportunity to embrace it at a much larger scale. The recent pandemic, which stretched the capacity of healthcare and welfare services, brought examples of displacing employees to fulfil roles in high-demand essential services. In countries where the virus was concentrated in only a few regions, health professionals could be deployed from less impacted regions to more impacted ones. For example, in South Korea, the government redeployed staff to regions more affected by COVID-19.⁸⁹ In Australia, the prime minister ordered agency heads to comply with redeployment of noncritical staff to other national, state, and territory agencies depending on need, leading to the temporary redeployment of thousands of government employees in new positions.⁹⁰ In Ireland, the government leveraged 1,000 public servants from across the government and trained them as contact tracers.⁹¹

3. Traditional Productivity Levers Can Drive Almost As Many Gains As Automation

Traditional productivity levers are operational improvements seen as standard best practice for decades. These include up-skilling, lean, centralization of procurement and organizational modernization.

These solutions may not be as novel as automation, agile or analytics, but still retain significant value. Our research suggests traditional levers are more impactful than agile and analytics in all the examined countries and roughly as impactful as automation in two of them—Oman and Qatar.

Furthermore, traditional levers have the benefit of often not requiring large prior capability-building efforts, which can delay impact; their use cases, risks, and mitigation strategies are well understood, so we would expect them to be a good place to start.

4. Consider Building Analytics Capabilities if the Department Manages Large Resource-Allocation Problems (For Example, Economic Affairs Or Infrastructure) or Processes Offering Large Opportunities For Fraud (For Example, Tax Authorities)

Not all problems lend themselves equally to treatment by analytics and AI techniques, as these require large quantities of data and well-defined definitions of success. In a public-sector context, the most common situations where these two conditions are met have to do with the allocation of resources and with detection of fraud.⁹²

Most departments have resource allocation issues and face fraud risks, but not to the same extent. Therefore, it makes sense to prioritize the investment in analytics capacities in departments where these are some of the main problems faced by the department.

88 Caroline Sharples, "Mental health is one of the most neglected areas of public health," International Science Council, September 10, 2020; Pierre L. Yong, Robert S. Saunders, and LeighAnne Olsen, "The healthcare imperative: Lowering costs and improving outcomes," Institute of Medicine, Washington, DC: National Academies Press, 2010.

89 OECD, "Skill measures to mobilise the workforce during the COVID-19 crisis," July 10, 2020, [oecd.org](https://www.oecd.org).

90 Judy Skatsoo, "Public servants to be redeployed against COVID-19," Government News, March 30, 2020, [governmentnews.com.au](https://www.governmentnews.com.au).

91 Martin Wall, "Large number of public service staff to be redeployed to contact tracing," Irish Times, March 27, 2020, [irishtimes.com](https://www.irishtimes.com).

92 Darrell M. West, "Using AI and machine learning to reduce government fraud," September 10, 2021, The Brookings Institution, [Brookings.edu](https://www.brookings.edu); Matt Higginson, Sahil Jain, Ajit Sawant, and Eric Schweikert, "Fighting identity theft in benefit claims and payments," October 16, 2020, [McKinsey.com](https://www.mckinsey.com); Juan Aristi Baquero, Adrian Murphy, Sean Christiansen, and Eric Schweikert, "How US states can protect coronavirus-benefits programs," May 15, 2020, [McKinsey.com](https://www.mckinsey.com); Susan Cunningham, Jonathan Davis, and Thomas Dohrmann, "The trillion-dollar prize: Plugging government revenue leaks with advanced analytics," January 29, 2018, [McKinsey.com](https://www.mckinsey.com).

For example, a Ministry of Foreign Affairs might have to decide where to open or close new embassies and consulates. This is at its heart a resource-allocation problem, and it would probably be a good idea to leverage some data to inform the decisions (for example, on bilateral trade or tourism flows). But many of the legitimate justifications for this particular resource-allocation problem will be difficult to capture in any data set (for example, historical ties or ability of certain countries to sway others on specific issues). Furthermore, there's probably a fuzzy definition of success: how to measure changes in diplomatic influence or how much having an embassy contributed to increasing exports.

Now consider the case of a Ministry of Transport. The main problems it tries to solve are related to resource allocation: Should we build a new airport? Which cities should be connected by a high-speed train network? Should we expand port capacity? For each of these questions there is a lot of relevant data that would be impossible for any human to process (for example, population, income, commute times, industrial production, trade, and transportation costs), and it is easier to run impact assessments and forecasts of how different plans would affect GDP, jobs, or any other variable that can be used as a measure of success.

As with resource allocation, virtually all public entities have issues with fraud—but not to the same extent. A municipal library might have some people using someone else's card to borrow more books than they would otherwise be allowed to take home. But it probably doesn't pay off to build an analytics model to estimate the likelihood of someone doing that. Meanwhile, at a Ministry of Health, improving fraud detection and the targeting of inspections can certainly pay off for the investment. In fact, the US Department of Health's Fraud Prevention System helped prevent \$527 million in losses to fraud as part of a suite of program-integrity efforts that saved almost \$18 billion a year at a return on investment of 12 to 1.⁹³

5. Consider Going Agile if the Department Requires Much Cross-Functional Collaboration (For Example, Managing of Complex Transactions or Strategy And Planning)

All departments manage a certain level of cross-functional collaboration, but investing in going agile should primarily be for departments in which success depends on an efficient collaboration between people with different expertise. The need for this form of collaboration is typically associated with building a new product (such as a new government app) or changing the experience of a service journey (such as automating voter registration). But it can also apply to other contexts where a high level of coordination is needed, including managing complex transactions and delivering new strategies or plans. Let's use these last two as examples.

First, consider complex transactions. Issuing a passport is relatively straightforward: a) a person can take on your details, verify if you meet certain requirements, and charge you for the passport, b) that information can be passed on to someone that might need to run some checks, c) maybe someone else then prints the passport, and d) another person delivers it to you. The process can be sequential without loss of efficiency; decisions are dependent but not interdependent. The "factory line" approach to organizing tasks works.

This is not the case when issuing a license for a new power plant. The decision will probably require different sets of specialists, such as energy specialists, environmentalists, lawyers, and civil engineers. Each of these specialists might come up with different sets of objections to the license and consider a set of conditions under which they would approve it. In a sequential approach, if at any point a department requires changes to the project, it would have to go back to the first department for validation until all departments are satisfied. This would likely imply multiple rounds of rejections, a lengthy decision, and an increasingly frustrated customer. An agile approach would likely make it easier for these different perspectives to be taken into account sooner and the customer brought in to discuss suggested changes.

Second, strategy and planning activities, by their very nature, require cross-functional collaboration. Strategy and planning provide precisely the direction and the tempo that help choreograph the different parts of the organization (or the country) and help it move as intended.

When strategy and planning take up the burden of coordination between different perspectives, less coordination is needed during continuous operation stages. For example, a good national school curriculum takes into account that often knowledge of one subject under one class is required for the understanding of a different subject on a different class—for example, students need to know algebra to solve physics problems. If this problem is addressed at the planning stage—potentially using an agile approach—then teachers can be empowered to run classes more autonomously.

Taking Action to Increase Government Productivity

Everywhere in the world, discussions within government and fiscal policy circles often turn to trade-offs between comprehensive public services and high taxes or minimal public services and low taxes. Different countries with different contexts and social values will no doubt arrive at different answers to this question, with far-reaching implications. While some governments in the Middle East have been able to avoid this trade-off thanks to fiscal revenues associated with fossil fuels, they too will have to face this dilemma in decarbonizing world.

Increasing government productivity should therefore be an important part of the public debate and governmental agenda. The more governments in the region manage to increase productivity, the less they will have to cut public services or increase taxes.

However, escaping the trade-off between quality services and low taxes implies making other tough choices for which there are no perfect solutions in at least three main domains:

1. Automation and Job Security

A significant share of productivity gains in government are likely going to come from automation. This is not completely new. The introduction of computers saw the end of scores of typists, messengers, and other administrative staff. Just recently, the COVID-19 crisis saw governments redeploying staff and employees taking on new skills and roles. Ireland developed tools to map transferrable skills and facilitate temporary mobility assignments across the public service. The United Kingdom is adjusting existing infrastructure and coordination mechanisms to reallocate employees according to need.⁹⁴ Redeployment of the workforce is an effective way to match workforce supply with changing demand and also serves as an alternative to job cuts.

Yet the potential scope for change given the opportunities for automation already in existence make possibly create a choice between going at full speed or making some employees feel like their job security is being threatened.

Taking full advantage of the opportunities brought forward by automation should not mean the dismissal of public-sector employees, but it will at least require their retraining or redeployment.

2. Investment Now Or Investment Later

When businesses are earlier adopters of new technologies, they often see rapid financial benefits: customers notice the superiority of their products and services and thus they earn new customers, which helps them get branding and scale benefits that make them able to charge a premium while reducing their cost base. Governments often provide services for which they are the sole provider (such as drivers licenses) or do so at a subsidized price (for example, public schools and hospitals) so that these market forces do not necessarily help further the case for innovation.

Furthermore, like in the private sector, being an early adopter of a certain technology can be risky. Risks include that costs tend to be higher early on, standards are not established and can change away from the acquired solutions, there can be a shortage of talent, implementation can prove difficult, and integration with legacy systems is not always a given.

This trade off is exemplified by investments in AI, where only ~40% of organizations making investments in AI see benefits.⁹⁵

This probably helps explain why government services tend to lag behind private ones in their level of digitization. Digital transformations are difficult in the private sector but even tougher in the public sector. Government IT projects requiring business change are six times more likely to record cost overruns and 20% more likely to miss deadlines than private-sector projects.⁹⁶

3. Data and Privacy

As governments perfect their analytics capacities there may be the potential for increased data gathering. This will require thought given rising conversations around consent, the type of data gathered, and how it is used. Citizens are already concerned about amount of data collected by governments globally. Defining guidelines for data gathering, storage and management will be crucial to ensure public support for government's use of their data, allowing in turn government to improve decision-making and service delivery.

95 Sam Ransbotham, Shervin Khodabandeh, Ronny Fehling, Burt Lafountain, David Kiron, "Winning with AI: Pioneers Combine Strategy, Organizational Behavior, and Technology", 2019, Sloanreview.mit.edu

96 Cem Dilmegani, Bengi Korkmaz, and Martin Lundqvist, "Public-sector digitization: The trillion-dollar challenge," McKinsey, December 2014, Mckinsey.com.

Conclusion

Throughout this article, we made the case for placing government productivity at the heart of public policy discussions in the Middle East. We did so by placing it in the context of rising citizen demands and increasing resource scarcity faced by many countries around the world and in the region, by identifying gaps in productivity in key sectors and estimating the “size of the prize.” Furthermore, we articulated what the journey toward greater productivity might look like by looking at ten high-impact unlock programs and providing some clues on how to navigate the task of prioritizing different programs.

Yet, as we highlighted in the previous section, the case for productivity is not as straightforward as it may seem. The case for cutting costs in the public sector isn’t always clear—for example, if staff made redundant by automation swell the ranks of the unemployed. Neither is the case for quality improvements if, for example, the costs associated with improving the quality of schooling can’t be passed on to citizens and will only be apparent decades later.

The task of improving government productivity allows governments to avoid some painful choices, but it forces them to make others. It requires pragmatism and patience: pragmatism to focus where change is possible and matters most, and patience to invest now and reap the rewards later.

The good news is that governments are not alone in this journey. First, as we saw in many of the examples we used, private partners can play a large role in helping governments increase their productivity⁹⁷. Second, increasing productivity is often not a competitive matter: one government doesn’t necessarily stand to lose if another government is more productive. This makes it a perfect matter for engagement on government-to-government relations at all levels.

Governments could benefit from regular dialogues on the choices they are facing on their productivity journey, from macro-level issues (like navigating the trade-offs of automation and job security), to technological ones (like setting technological standards). And the World Government Summit and other forums can play an important role in enabling and fostering these discussions.

For our part, we hope to continue to help governments make informed decisions about these choices and implement the programs needed to make them a reality.

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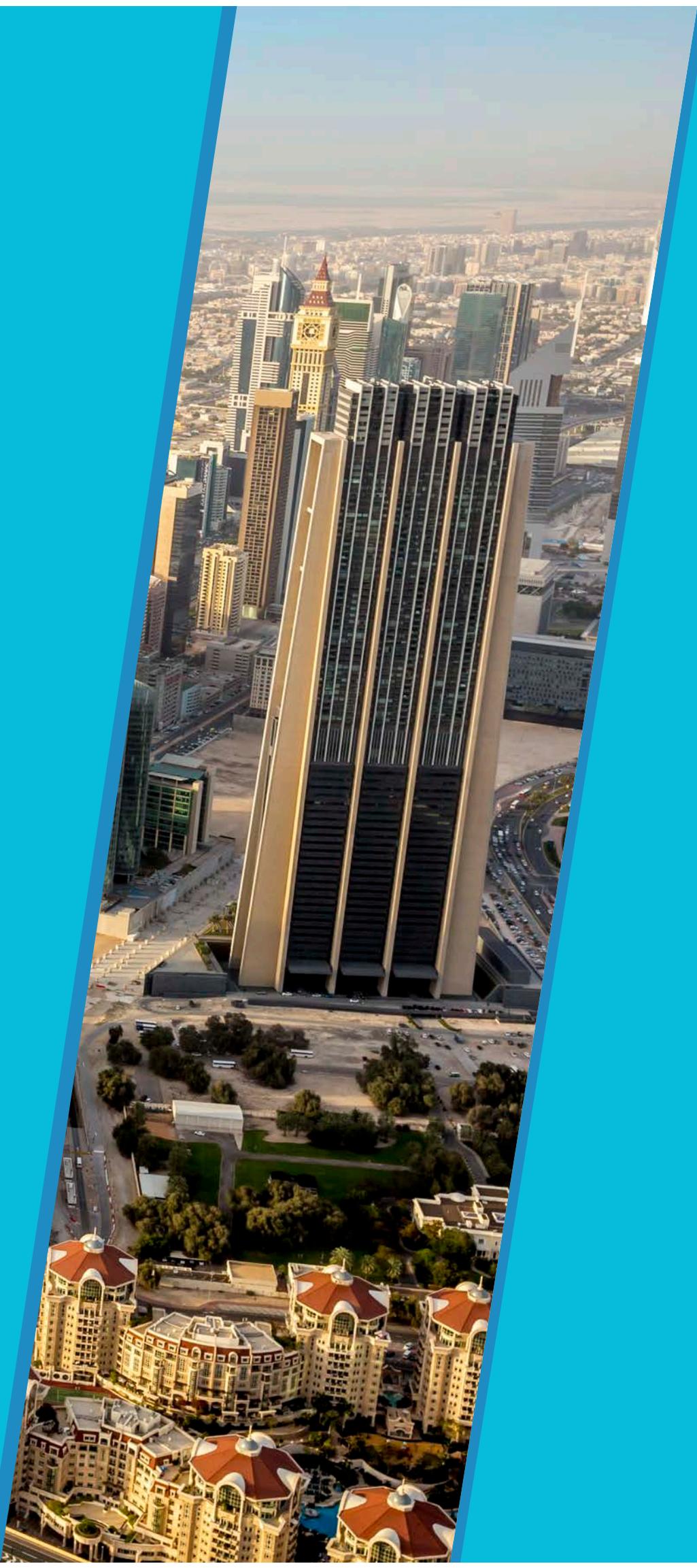
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