# THE DIGITAL SPRINTERS: THE CASE OF RUSSIA

> RUSSIA COULD UNLOCK AN ADDITIONAL 521B USD OF ECONOMIC IMPACT FOR 2030 THROUGH SUPPORTIVE POLICIES THAT ENABLE FULL UTILIZATION OF DIGITAL TECHNOLOGIES.

*Globally, there has been a large increase in policy focus on the digital transformation of economy, society and government. This has led to significant uptakes in internet penetration (as evidenced by rising internet use). Reaching an internet penetration rate of 81 percent in 2018, Russia has emerged as digital powerhouse producing a number of positive impacts for its economy. For example, according to research by RAEC, 37 percent of companies in traditional sectors credit the introduction of mobile technologies with the improvement of internal business processes in terms of increasing efficiency in decision-making and 34 percent note an increase in productivity.[1] In the context of COVID-19 pandemic, digital technologies have contributed to the sustainability and resilience of the Russian economy and the society at large which was able to quickly adjust to the new reality. Going forward Russia could capture a potential annual (year-on-year) economic impact of up to* ***USD521 billion in 2030*** *through supportive policies that enable further digital transformation and digital maturity.[2]*

*Given the need to rebuild economies following the impact of COVID-19, the importance of capturing this potential digital dividend becomes ever more crucial. This research by economic strategy firm AlphaBeta (commissioned by Google) aims to understand how emerging economies can fully exploit digital technologies to achieve gains in economic development. The report focuses on 16 important emerging economies (which we dub the "Digital Sprinters"). These economies are Argentina, Brazil, Chile, Colombia, Egypt, Israel, Kenya, Mexico, Nigeria, Peru, Saudi Arabia, South Africa, Russia, Turkey, the United Arab Emirates and Ukraine. Together, these "Digital Sprinters" account for 13 percent of GDP, 16 percent of population and 19 percent of internet users globally.*

*Based on this research, a number of insights across the Digital Sprinters emerged, that are of relevance to Russia and are summarized in this document. More details can be found in the full report.[3]*

*1. RAEC (2020), Mobile Economy Ecosystem: The Impact of Mobile Applications on the National Economy, Productivity and the Employment Market. Available at: https://raec.ru/activity/analytics/11360/*

*2. These estimates refer to the value generated by 39 technology applications across 10 sectors in 2030, quantified based on a "Full adoption" scenario (i.e. 100 percent adoption). This implies that these ten sectors will become "Digital leaders" with significant leap-frogging. A "Full adoption" scenario is unlikely to be realistic but useful as a thought experiment and to frame the total opportunity.*
*Estimates do not represent GDP or market size (revenue), but rather a combination of economic impacts such as productivity gains, increased revenues and cost savings. The relevant technology applications by sector and their sources of value (e.g. reduced wastage in production, enhanced consumer offerings) were identified based on a detailed review of the academic literature. The exact sizing methodology is unique to each of the 39 technology applications, but estimates use a series of international and country-specific case studies for each technology application to quantify estimates. Across the 39 estimations economic indicators sourced from international organizations such as the World Bank, International Labor Organization, OECD and national statistics offices were used.*
*Detailed data sources and estimation methodologies for each of the 39 applications are listed in the Appendix to the main report, linked here https://alphabeta.com/our-research/the-digital-sprinters-capturing-a-us34-trillion-through-innovative-public-policy/*

*3. This research was prepared by AlphaBeta for Google. All information in this summary and the main report was derived from AlphaBeta analysis using both proprietary and publicly available research, data and information. Google does not endorse any estimates.*

## While internet adoption and digital transformation have already delivered positive results, unlocking their full potential may require another push. If the transition from digital penetration to digital maturity could be fully leveraged, digital technologies could transform economic growth in Russia.

The research identifies eight groups of digital technologies with significant potential to enhance economic development. In the hypothetical scenario where applications based on the eight digital technologies in ten sectors are fully adopted, the combined annual economic impact in Russia could reach up to ***USD521 billion in 2030***, which is about 25 percent of the country's estimated GDP in 2030 (see Exhibit 1). It is important to note that these benefits of digital maturity do not only accrue to the ICT or "tech" sector. In fact, about 56 percent of ***the potential benefits of further digital transformation accrue to traditional sectors, namely resources, infrastructure, and agriculture.*** Globally and across the Digital Sprinters, firms have developed innovative applications of technology in these sectors that could capture this opportunity. In Chile, TIMining helps mining companies develop "digital twins" of their mining operations, driving efficiency.[4] Israel's ag-tech sector, is world leading in precision farming which can lead to drastic yield improvements.[5]

## 12 policy levers linked to four strategic imperatives are crucial to go beyond internet penetration and drive digital maturity to capture the benefits linked to economic development.

A review of impactful, innovative and practical digital policies identified a number of important levers for capturing the digital-led economic development opportunity (see Exhibit 2).

## While it is unlikely that all 12 policy levers will be applicable to the Russian context, a number of innovative policy levers could be considered to accelerate the digital transformation and drive Russia's digital maturity.

### POLICY LEVER 1:

### ESTABLISH PLATFORMS TO INTERACT AND CROWD-SOURCE INNOVATION

Russia's portal "Gosuslugi.ru" already provides a whole range of public services online and was ranked fourth top government website worldwide by SimilarWeb.[6] However, innovations to improve government services can come from anyone and anywhere; governments should engage and empower citizens to participate in this process. For example, Moscow city's crowd sourcing platform "Active Citizen" uses blockchain technology to collect feedback from citizens and run online votes on questions related to urban planning in order to build trust amongst citizens and combat voter fraud.[7] Tam Development, a Saudi Arab-based startup, has proven that such crowd-sourced innovation can be scaled, co-creating 50 local and regional ground-up programs with 20 government entities in the Arab region.[8]

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### POLICY LEVER 2:

### DEVELOP DIGITAL TRANSFORMATION (INNOVATION) CENTERS AND MODEL (LEARNING) FACTORIES

These refer to physical places where entrepreneurs, business owners, researchers and innovators can come to try their hands at new technologies and digital applications. Often such places also provide training and skills development. Russia's Agency for Strategic Initiatives (ASI) has already established several dozens of collaborative work centers referred to as "Boiling Points"[9] but other examples include Turkey's digital transformation centers where MSMEs can receive training in real production environments.[10]

### POLICY LEVER 3:

### LEVERAGE CLOUD COMPUTING FOR EFFICIENCY GAINS ACROSS THE GOVERNMENT

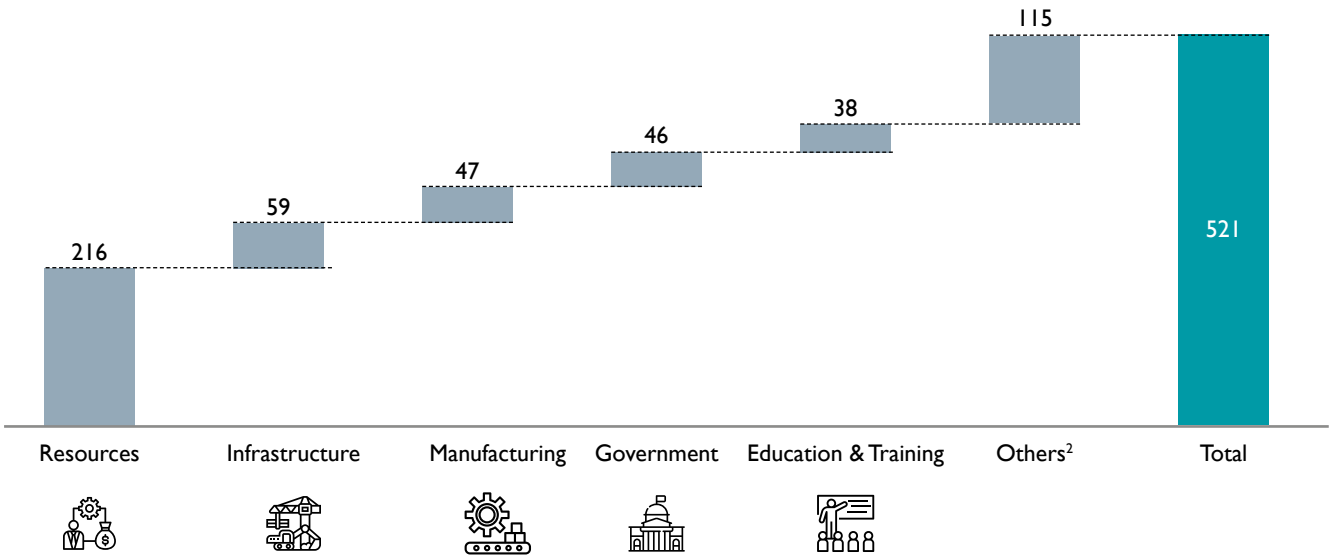
Cloud computing technologies across government can lead to significant efficiency gains and cost savings for governments' ICT budgets. But more importantly than the savings, cloud computing, can be act as infrastructure that allows users to utilize it for different applications. Cloud computing has been leveraged in the urban planning, often referred to as Smart Cities.[11] Rio de Janeiro has begun to implement smart solutions aimed at improving urban planning, transport flows, city fleet management systems and allow fleet vehicles to communicate with headquarters when it is time for maintenance checks.

*4. Austmine (2019), "AI in the Chilean Mining Industry" Available at: http://www.austmine.com.au/News/ai-in-the-chilean-mining-industry*
*5. Leichman (2019), "The top 12 ways Israel is feeding the world", Israel 21c. Available at: https://www.israel21c.org/the-top-12-ways-israel-feeds-the-world/*
*6. Similarweb (2020), Top Websites Ranking. Accessed August 2020. Available at: https://www.similarweb.com/top-websites/category/law-and-government/government/*
*7. Bloomberg (2017), "Can the Blockchain Tame Moscow's Wild Politics?" Available at: https://www.bloomberg.com/news/articles/2017-12-22/moscow-s-active-citizen-app-goes-on-the-blockchain*
*8. TAM, Available at: https://tamhub.com/*
*9. ASI (2019), Agency for Strategic Initiatives Supervisory Board meeting. Available at: http://en.kremlin.ru/events/president/news/59675*
*10. Gunes and Sahin (2018), "Turkey to establish digital transformation centers", Anadolu Agency. Available at: https://www.aa.com.tr/en/economy/turkey-to-establish-digital-transformation-centers/1258349*
*11. IDB (2018), Cloud Computing: Opportunities and Challenges for Sustainable Economic Development in Latin America and the Caribbean. Available at https://publications.iadb.org/en/cloud-computing-opportunities-and-challenges-sustainable-economic-development-latin-america-and*

## EXHIBIT 1: THE VALUE OF DIGITAL TECHNOLOGIES

### POTENTIAL ANNUAL ECONOMIC IMPACT IN THE FULL ADOPTION SCENARIO

**USD BILLION, 2030 (HIGH-END ESTIMATES)[1]**




*1 These estimates do not represent GDP or market size (revenue), but rather economic impact, including GDP increments, productivity gains, cost savings, time savings, increased revenues, increased wages and increased tax collection.*
*2 Others include Agriculture & Food; Consumer, Retail & Hospitality; Financial Services; Health, and Mobility.*
*SOURCE: AlphaBeta analysis*

## EXHIBIT 2: POLICIES TO CAPTURE THE VALUE OF DIGITAL TECHNOLOGIES

**LEAD FROM THE TOP**

| 1 Steer the direction | 2 Coordinate across government | 3 Support global digital integration |
|---|---|---|
| **Drive change through the public sector** | **Equip the private sector with the digital essentials** | **Put citizens at the center of the digital economy** |
| 4 Create tipping points through government procurement | 7 Craft regulations for the digital, not analog era | 11 Support those who could be left behind by the digital transformation |
| 5 Go 100% digital on government services | 8 Build future-proof digital infrastructure with interoperability and upgrading in mind | 12 Equip people with the right skills to access digital opportunities |
| 6 Crowd source policy innovation | 9 Equip MSMEs with the digital tools to support their growth | |
| | 10 Use co-creation, the sharing economy and new digital incentives to stimulate innovation | |

While it is unlikely that all 12 policy levers will be applicable to the Russian context, a number of innovative policy levers could be considered to accelerate the digital transformation and drive Russia's digital maturity.

### POLICY LEVER 4:

### BUILD SANDBOXES, NOT CASTLES

Regulatory sandboxes refer to a regulatory approach that allows companies to conduct time-bound testing of innovative products in the real world. Regulatory sandboxes are useful policy tools to understand the policy implications of introducing certain products while continuing to promote technological innovation.[12] From a private sector perspective, sandboxes reduce the costs of production and time-to-market. Russia has been a global leader with sandbox approaches in the financial sector (in particular on blockchain). Given these lessons, Russia could extend similar approaches to other sectors.

### POLICY LEVER 5:

### IMPLEMENT TARGETED TRAININGS, SOCIALIZATION AND BEHAVIORAL LEVERS FOR TECHNOLOGY ADOPTION

Targeted training initiatives can be effective at exposing MSMEs to new sector-relevant digital technologies, as well as developing their skills, and driving adoption. Trainings can be developed in partnership with solution providers. For example, Indonesia's "Gapura Digital", a company supported by Google, aims to train about 1.47 million Micro, Small and Medium Enterprise (MSME) workers by 2020 on how digital platforms could be leveraged to scale up their businesses.[13] Sweden's Digilyft Kickstart program is an example of how such initiatives can be effectively driven by governments.[14]

### POLICY LEVER 6:

### ENCOURAGE A SHARING ECONOMY FOR NON-SERVICES

Sharing of fixed assets (e.g. equipment, warehouses) that reduces fixed costs is enabled by digital technologies such as the Internet of Things. However, much of the innovation to date has been in service sectors (e.g. car sharing, home sharing). The upside potential in traditional sectors such as manufacturing and agriculture, though, is significant. An example is Hello Tractor which works with smallholder farmers in Africa by aggregating smallholder farmers' requests for tractor service on behalf of tractor owners, while providing enhanced security through remote asset tracking and virtual monitoring.[15]

### POLICY LEVER 7:

### CO-CREATE NEW PRODUCTS AND SERVICES WITH THE PRIVATE SECTOR

Governments and the private sector can work together to leverage to co-create mutually beneficial products. Russia can leverage the lessons learned from co-creation in leading sectors such as financial services for other sectors. For example, Masterchain is an Ethereum-based blockchain digital payments system developed by the Russian Central Bank and supported by several of Russia's largest local banks.

### POLICY LEVER 8:

### INCREASE CURRICULUM RESPONSIVENESS

The inability of educational curriculums to keep pace with the evolving skill needs of a digital economy can be a key challenge. An example of an education system that has continually adapted to the evolving skill needs of the economy is Singapore's, which halved its curriculum to allocate more time to honing soft skills such as creative and critical thinking. The Singapore government set up a dedicated unit to reach out to firms and educate them about worker reskilling needs and opportunities under the government's skills training courses.[16]

### POLICY LEVER 9:

### INTRODUCE DIGITAL BOOTCAMPS

Short-term, focused education courses, which are run by employers can be crucial to fill in necessary digital skill gaps. For example, the "Generation Program" - a not-for-profit program founded by McKinsey & Company and funded by a range of public, private and non-government organizations - focuses on four sectors with teaching facilities in 119 cities in 6 continents. It features direct contact with potential employers, matching trainee attributes with employer needs, courses that cover technical, behavioral, and mental skills, continuous monitoring and support during and after the program, and a strong alumni network.[17]

*12. Financial Conduct Authority, "Regulatory Sandboxes." Available at: https://www.fca.org.uk/firms/innovation/regulatory-sandbox*
*13. Google (2020), "Gapura Digital". Available at: https://gapuradigital.withgoogle.com/stories*
*14. Readie and Nesta (2018), Delivering Digital Skills – A guide to preparing the workforce for an inclusive digital economy. Available at: https://media.nesta.org.uk/documents/Readie_Digital_Skills_booklet_online.pdf*
*15. https://www.hellotractor.com/about-us/*
*16. Mokhtar (2018), "SkillsFuture Singapore to deepen skills of training and adult education providers", Today. Available at: https://www.todayonline.com/singapore/skillsfuture-singapore-deepen-skills-training-and-adult-education-providers*
*17. Generation Program (2019). Available at: https://www.generation.org/*

FOR MORE DETAILED INFORMATION ON THE RESEARCH, PLEASE REFER TO THE FULL REPORT AT:
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