

THE DIGITAL SPRINTERS: THE CASE OF TURKEY

“ TURKEY COULD UNLOCK AN ADDITIONAL USD269 BILLION 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). For example, from 2010 until 2018 Turkey has successfully brought an additional 30 percent of its population online.¹ Initiatives likely to have contributed to this include the Turkish government’s “Information Society Strategy (2015-2018)”² launched in 2015 which targeted to increase the number of broadband subscribers from a 26.5 percent penetration rate in 2012 to 70 percent in 2018.³ Going forward however, more than providing access to the internet may likely be required to fully leverage digital technologies for economic development. Turkey could capture a potential annual (year-on-year) economic impact of up to **USD269 billion in 2030** through supportive policies that enable full utilization of digital technologies.³ 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 leverage 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 Turkey and are summarized in this document. More details can be found in the full report.⁴

1. Based on World Bank, World Development Indicators.

2. Information Society Department (2015), “2015-2019 Information Society Strategy and Action Plan”. Available at http://www.bilgitoplumu.gov.tr/en/wp-content/uploads/2016/03/Information_Society_Strategy_and_Action_Plan_2015-2018.pdf

3. 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/>

4. 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. The full report can be found here <https://alphabeta.com/our-research/the-digital-sprinters-capturing-a-us34-trillion-through-innovative-public-policy/>



In Turkey, as in most of the Digital Sprinters, fast growth in internet penetration has not translated into a faster pace of economic growth.

Historically, economic growth in Turkey has not kept pace with internet adoption. For example, since 2013, Turkey's internet population has grown by 10.7 percent annually, but real GDP has only increased by 4.9 percent annually.⁵ Labor productivity has also only risen by 2.4 percent annually during this same period.

If the transition from digital penetration to economic growth could be fully leveraged, digital technologies could transform economic development in Turkey.

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 Turkey could reach up to **USD269 billion in 2030**, which is about 24 percent of the country's estimated GDP in 2030 (see Exhibit 1). About 32 percent of the **potential benefits of digital technologies accrue to traditional sectors, namely resources, infrastructure, and agriculture.**

12 policy levers linked to four strategic imperatives are crucial to go beyond digital penetration and capture the digital 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).

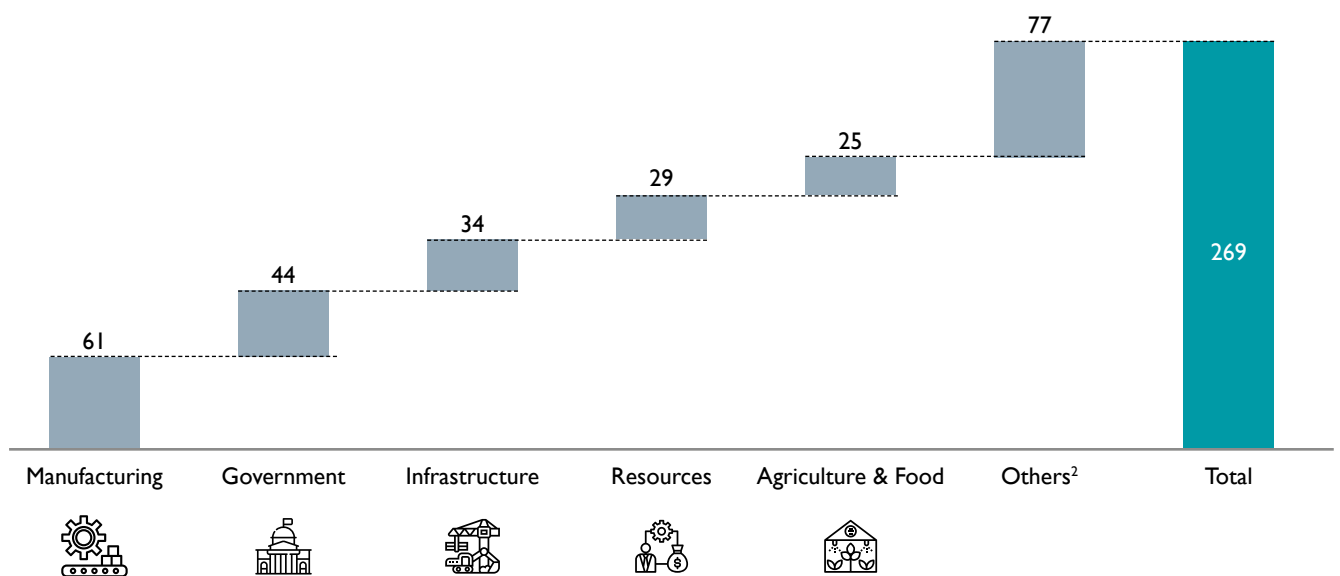
5. Based on World Bank, World Development Indicators.



EXHIBIT 1: THE VALUE OF DIGITAL TECHNOLOGIES

POTENTIAL ANNUAL ECONOMIC IMPACT IN THE FULL ADOPTION SCENARIO

USD BILLION, 2030 (HIGH-END ESTIMATES)¹

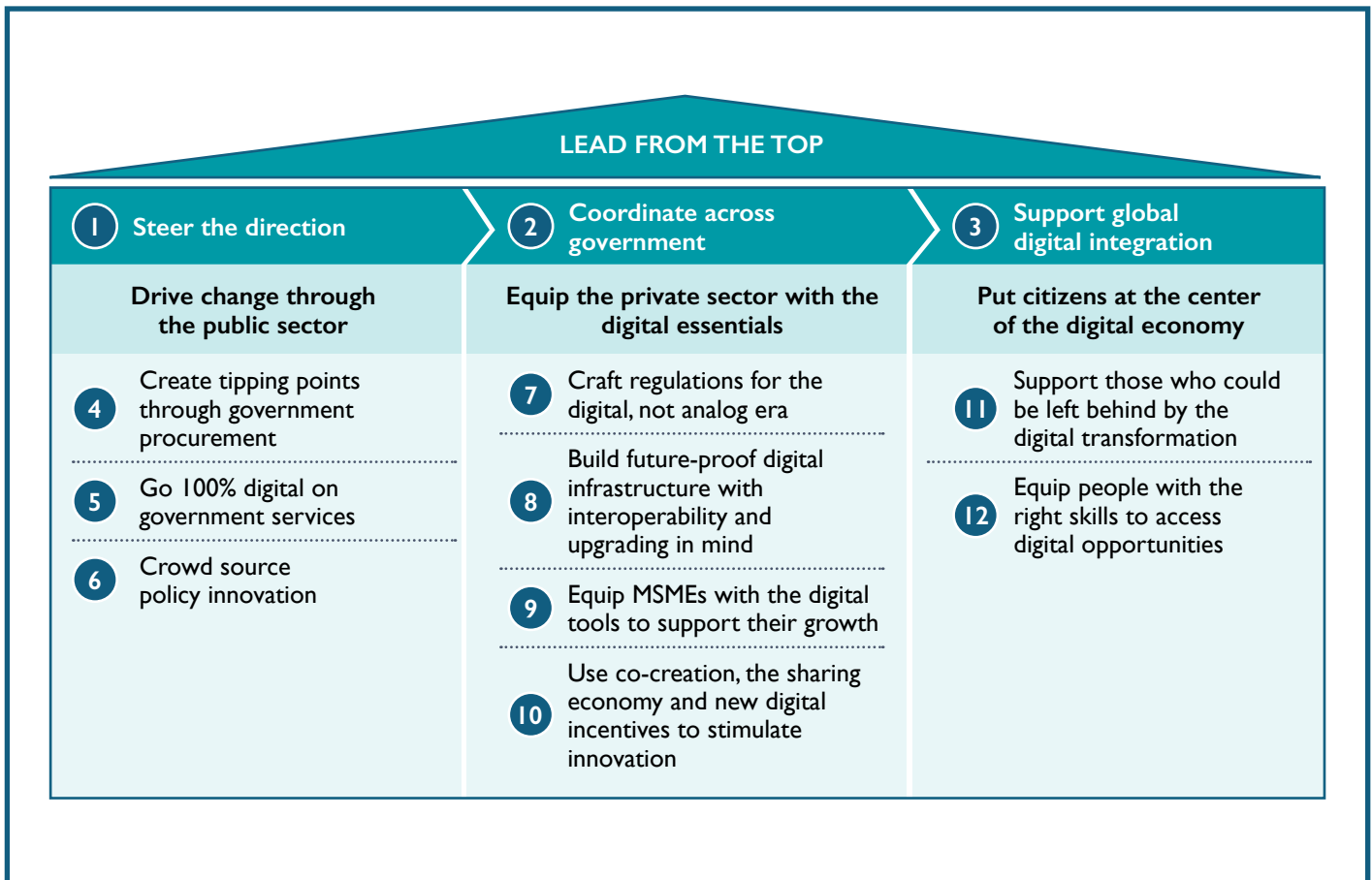


¹ These estimates do not represent GDP or market size (revenue), but rather economic impact, including GDP increments, productivity gains, cost savings, time savings, increased revenues, increased wages and increased tax collection.

² Others include Consumer, Retail & Hospitality; Education & Training; Financial Services; Health, and Mobility.

SOURCE: AlphaBeta analysis

EXHIBIT 2: POLICIES TO CAPTURE THE VALUE OF DIGITAL TECHNOLOGIES



Translating digital technologies into broad-based economic development will be one of the crucial policy making challenges of the 21st century. Utilizing the 12 policy levers highlighted in AlphaBeta's report can help guide policymaker efforts most effectively. The specific implementation of these policy levers could look very different in each country, depending on the country context (e.g. regulatory processes, history of engagement with the private sector, etc.). For example, it is unlikely, given Turkey's fast paced progress on digital transformation, that all

12 policy levers will be equally applicable to the Turkish context. However, AlphaBeta's research provides a number of innovative policy levers and global best practice examples that could be considered in Turkey's ongoing digital sprint. We hope that this report can provide the stimulus for policy discussions in Turkey on how to strengthen the potential of digital technologies to enhance future economic growth, in particular in the sectors with the largest estimated digital economic potential for Turkey in 2030 (i.e. manufacturing, government and infrastructure).

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

<https://alphabeta.com/our-research/the-digital-sprinters-capturing-a-us34-trillion-through-innovative-public-policy/>

Prepared by AlphaBeta

alphaBeta
strategy x economics