

THE DIGITAL SPRINTERS: THE CASE OF ISRAEL

“ ISRAEL COULD UNLOCK AN ADDITIONAL USD71 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). Reaching an internet penetration rate of 83.7 percent in 2018, Israel has emerged as digital powerhouse producing a vibrant start-up scene and some of the world's "smartest cities".¹ In rural and less developed parts of the country, initiatives such as "Digital Israel" launched in 2014 have expanded the geographical coverage of advanced broadband services to bridge the digital gap in society.² However, Israel's digital transformation is not yet completed. For example, Israel manufacturers' exploration of Industry 4.0 technologies such as robotics and additive manufacturing are only nascent.³ Going forward Israel could reach a potential annual (year-on-year) economic impact of up to **USD71 billion in 2030** through supportive policies that enable full utilization of digital technologies.⁴ 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 Israel and are summarized in this document. More details can be found in the full report.⁵

1. Based on World Bank, World Development Indicators.

2. The National Digital Program of the Government of Israel (2020). Available at: <http://digital-israel.mag.calltext.co.il/magazine/83/pages/38>

3. Deloitte (2018), Unlocking Industry 4.0 Potential – Transforming through startup-manufacturer collaborations and the unique role of the Israeli startup ecosystem. Available at: https://israel.ahk.de/fileadmin/AHK_Israel/Unlocking_Industry_4.0_Potential_-_Israel_s_role_in_global_trends.pdf

4. 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/>

5. 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.



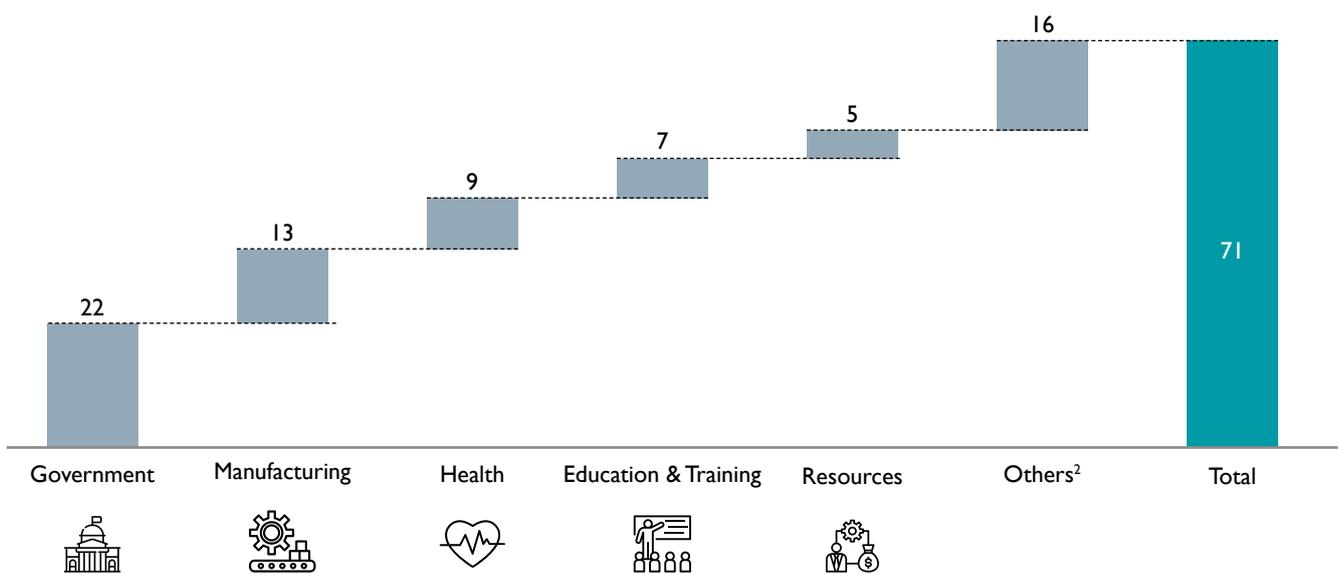
If the transition from digital penetration to productivity could be fully leveraged, digital technologies could transform economic growth in Israel.

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 Israel could reach up to **USD71 billion in 2030**, which is about 13 percent of the country's estimated GDP in 2030 (see Exhibit 1). About 15 percent of the **potential benefits of digital technologies accrue to traditional sectors, namely resources, infrastructure, and agriculture.**

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; Infrastructure, and Mobility.

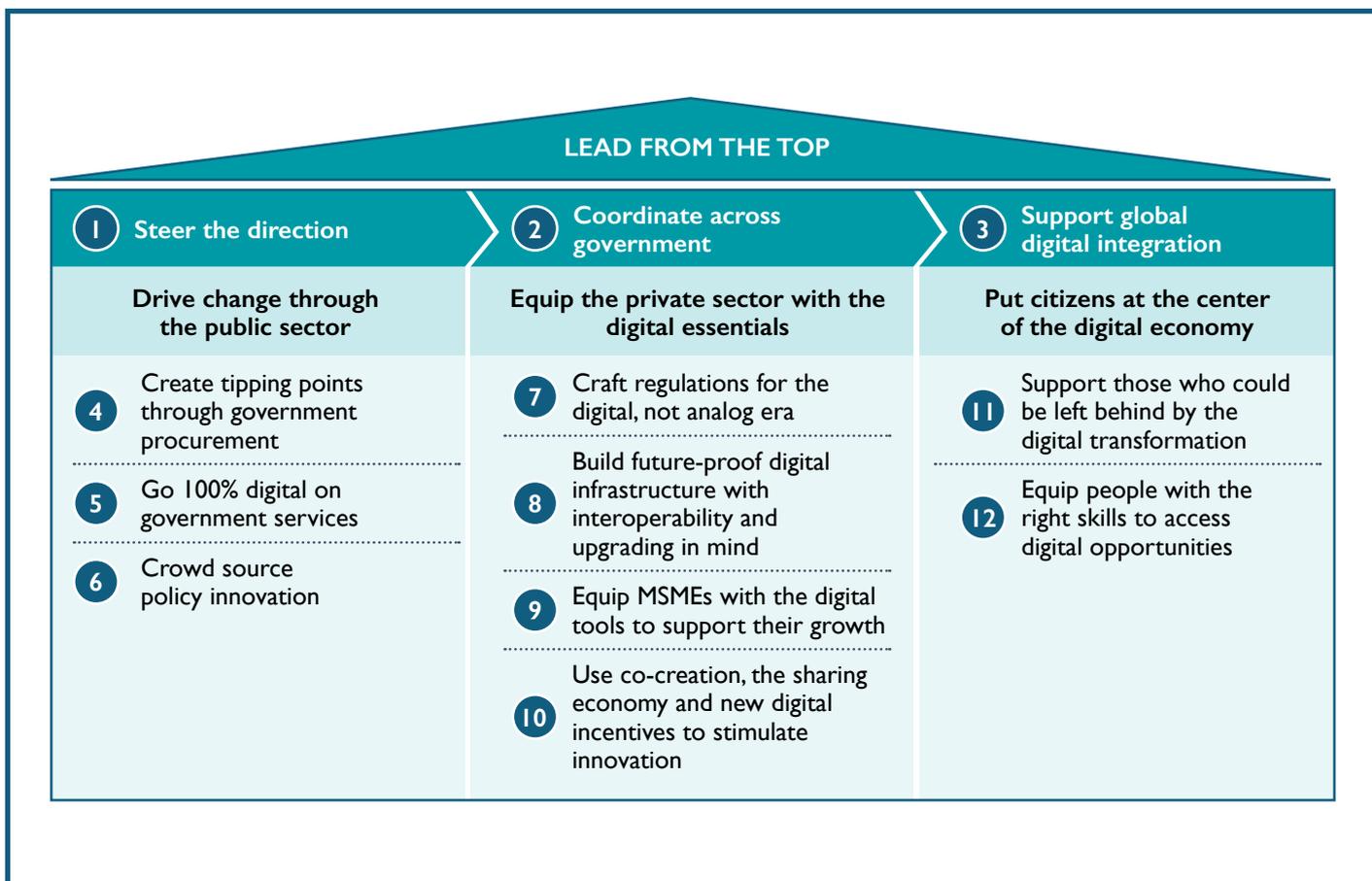
SOURCE: AlphaBeta analysis



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).

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 Israel's fast paced progress on digital transformation, that all

12 policy levers will be equally applicable to Israel's context. However, AlphaBeta's research provides a number of innovative policy levers and global best practice examples that could be considered in Israel's ongoing 'Digital Sprint'. We hope that this report can provide the stimulus for policy discussions in Israel 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 Israel in 2030 (i.e. government, manufacturing and health).

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