The global market
of Govtech solutions

Analytical overview

KRESTON UKRAINE

Contents

Forewords

Sergey Atamas
Managing partner of Kreston Ukraine

GovTech is a leading trend in the modern development of public services driven by new public demands and growing expectations from the authorities. By introducing this concept, governments around the world are solving numerous problems. For instance, bus companies in Israel save up to USD 3 million annually by using a route planning application; in Denmark, a document management application allows employees to spend only 10% of their working time on related tasks weekly; public CCTV systems have significantly reduced crime in Italy. Govtech solutions address various problems according to the strategic objectives of public services development, whether it is transport, security, energy efficiency, education, healthcare, or others.

The demand from the public compels governments to increase IT spending annually, develop appropriate national strategies, and seek the best models of interaction with Govtech providers. In turn, such providers tailor their solutions to public needs and allocated budgets. In the modern context, there are two main cooperation models between the government and Govtech providers: either such companies initiate and implement such solutions (as in the USA and Europe), or the government agencies devise and develop Govtech initiatives, which are not openly discussed (Asia).

This overview offers an analysis of the general situation in the market of Govtech solutions, features of the competitive environment, and industry development trends. It also assesses distinctions between regional markets and models of cooperation of governments and Govtech providers.

Oleksandr Romanishyn,
Reforms Delivery Office
of the Cabinet of Ministers of Ukraine

Technology and innovation are paramount aspects of the modern public sector, as they revolutionise the interaction between the state and its citizens. Although a country's digitalisation process is extremely complex and fraught with many challenges, it has enormous potential for every nation, and Ukraine is no exception.

We at the Reforms Delivery Office are aware of the importance of the GovTech sector for the future of Ukraine and focus our efforts on promoting the Ukrainian experience internationally.

For example, in October 2022, our country was recognised as a prospective member of the OECD, meaning that cooperation with this organisation on various issues, including digital technology and innovation, is to be expanded. The OECD is the developer of the Observatory of Public Sector Innovation (OPSI), a platform where developers can showcase their GovTech products and learn from competitors. Furthermore, this platform allows finding a partner for the joint implementation of GovTech solutions. As of now the platform comprises more than 600 case studies from over 80 counties. Ukraine has 6 case studies on the platform including eProcurement system ProZorro, SPILNO — digital democracy platforms for citizens, organizations and government institutions, public private collabroation model eZdorovya, which enables to create a national highly secure eHealth system fast, effectively and transparently.

The continuous exchange of experience and cooperation with international partners promises to be a powerful driver for the development of the GovTech sector in Ukraine, positioning us a world leader among the leading countries in the world, such as the United States, Singapore, the UK, South Korea, Australia.

Oleksii Sobolev, CFA
Deputy Minister of Economy of Ukraine

During the last year, I have seen firsthand the impact that GovTech solutions can have on people and businesses, especially in times of crisis. During wartime, digital technologies were crucial in ensuring the continuation of economic activity, despite the challenges faced.

I am proud to have been part of the team that created Prozorro.Sale, the world's most transparent e-auction system. Such innovative solutions have transformed the management of public assets in Ukraine, promoting transparency, efficiency, and accountability. Thanks to Prozorro and Prozorro.Sale, the Ukrainian government was able to continue public procurements and support businesses while providing assets for sale and lease even during the most challenging times. The platforms enabled us to hold online auctions and support small and medium enterprises, ensuring that the wheels of the economy kept turning.

The results speak for themselves. During just the fourth quarter of 2022, the government managed to generate around 50 million USD from privatisation, demonstrating the trust and confidence in the platform from both businesses and government entities. The success of Prozorro.Sale has not gone unnoticed, and our innovative solutions have garnered interest from around the world. In 2021 the platform won a prestigious Open Government Partnership award; in 2022, the UN hailed it as a public service of the year!

I am proud to present this report, prepared by Kreston Ukraine in partnership with the Ministry of Digital Transformation of Ukraine, the Ministry of Economy of Ukraine, the Reform Delivery Office of the Cabinet of Ministers of Ukraine, and ISE Corporate Accelerator. It provides an in-depth analysis of the GovTech market and highlights the key trends and developments in the industry. It also assesses the regional differences and models of cooperation between governments and GovTech developers, providing valuable insights for policymakers and other stakeholders.

Valeriya Ionan,
Deputy Minister for Eurointegration
at the Ministry of Digital Transformation of Ukraine

While Ukraine was under martial law in 2022, digitalisation contributed to the resilience of our nation, ensuring smooth government functioning despite all the challenges. This report proudly presents our accomplishments in the digital transformation of Ukrainian public services during wartime, demonstrating that our nation is a strong player in the global Govtech sector.

Throughout the year, the Ministry of Digital Transformation focused on further developing the Diia web portal and mobile application and their adaptation to wartime realities. We introduced 39 brand-new public administration and defense-related services, including Diia.TV, Diia.Radio, donations for the army, and many more. Our efforts contributed to an increase in the Diia user base by 6 million. Today, 18.5 million Ukrainians use the Diia mobile application, and almost 22 million are users of the web portal.

We continued to scale the national project to develop entrepreneurship and exports, Diia.Business. One of the components of the project is a one-stop online shop for entrepreneurs with information for starting and growing businesses. Another component is the Diia.Business Centers. Before 24.02.2022, we opened 11 Centers, and then, in May 2022, we opened the first Diia.Business Center abroad, in Warsaw, Poland. In the Centers, you can get consultations, attend educational events for entrepreneurs, rent space for holding your events, and test your product at a special pop-up location.

In addition, we continued developing a special tax and legal framework for Ukrainian tech companies, Diia.City. It was joined by 414 companies employing 34 thousand professionals by the end of 2022.

At the Ministry, we understand that tech entrepreneurship starts from basic digital skills. Hence, we are developing a national project called Diia.Digital Education. It consists of an online platform for developing digital skills and offline hubs. The platform offers more than 90 free educational mini-series in the edutainment format, and 1,5 million people have already completed its courses on digital liter- acy. And before the start of the full-scale invasion, 6,200 Digital Education Hubs operated across Ukraine on the bases of libraries, educational institutions, and ed- ucational centres, where anyone could access gadgets and the Internet.

The global GovTech community has taken notice of Ukraine's accomplishments on the 'cyber front'. In particular, Estonia has presented its version of the Diia app. The GovTech Campus (an innovative centre for government technology in Ger- many) and the Federal Ministry of Finance of the Republic of Austria entered into a memorandum of cooperation with the Ministry of Digital Transformation of Ukraine. Developing such a partnership allows us to share our experience in cy- bersecurity and the digitalisation of public services, promote our vision of a future digital nation, and lay the foundation for a united, robust, and secure digital future.

Elena Malitskaya
CEO and founder of ISE Corporate Accelerator

The introduction of GovTech solutions in Ukraine started not so long ago, but today they have already become an integral part of our lives. GovTech sector delivers advantages to all stakeholders: governments optimise their budgets while improving the quality of public services, startups benefit from another market for their solutions and access to public procurements, and citizens enjoy more accessible and valuable public services.

This conclusion is also supported by the key takeaways from GovTechSummit.eu:

1. GovTech solutions can reduce the cost of public services for governments, thus re- sponding to the challenges caused by the global inflation surge.

2. The intelligence provided by GovTech solutions optimises energy consumption and al- lows consumers to connect to the power grids efficiently and equitably.

3. GovTech solutions become indispensable in wartime, as demonstrated by the Diya application allowing the Ukrainian government to provide a significant scope of public services that would not have been available offline.

4. The automation of information and process management offered by GovTech solu- tions offloads a significant amount of work from civil servants, thus allowing them to improve the quality of their job.

5. The high quality of public services increase citizens' trust in public institutions.

That is why ISE Corporate Accelerator focuses on GovTech solutions and strives to promote and support them throughout the world.
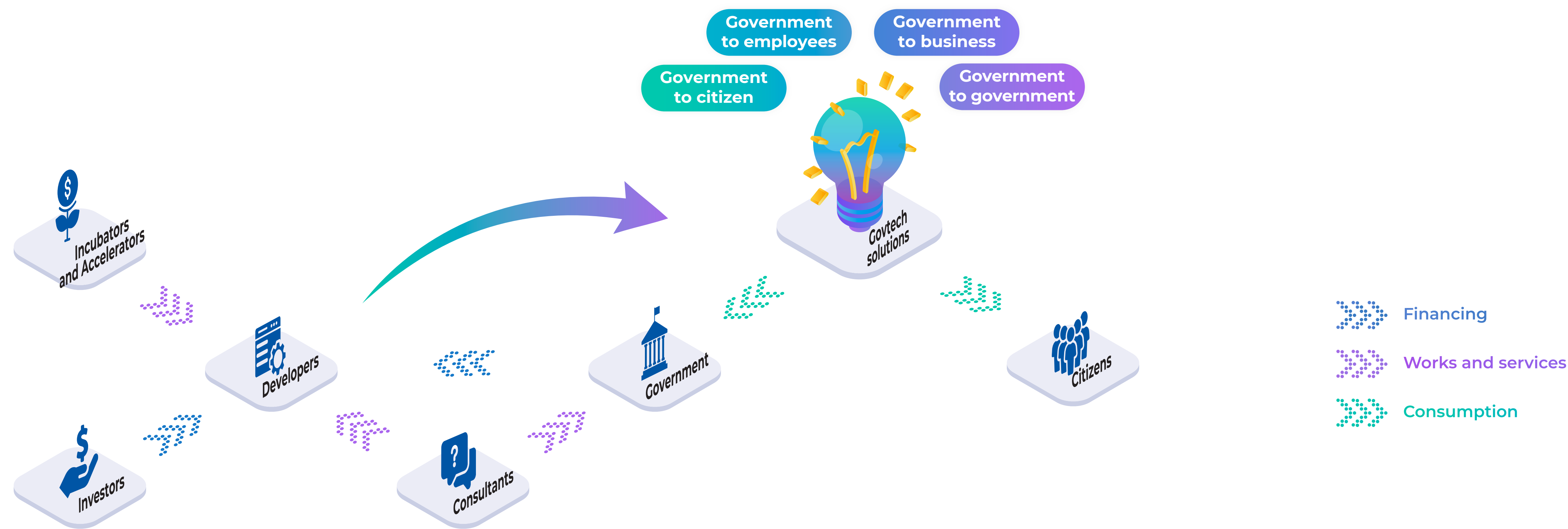
What is
Govtech?

What is Govtech?

Govtech is a nationwide approach to public sector modernization focused on improving the citizens' quality of life and streamlining administrative and bureaucratic processes using advanced technology solutions.

Manual paperwork overloads public institutions, increases service delivery time, and compromises service quality. In addition, existing Govtech solutions, which have become outdated in a modern context, also require modernization. Although the public sector has begun introducing innovative technologies to improve efficiency, the pace has been slower than in the private sector. However, the COVID-19 pandemic has pushed public agencies towards digital transformation. Hundreds of Govtech companies worldwide are tackling the problem of outdated and inefficient systems and processes..
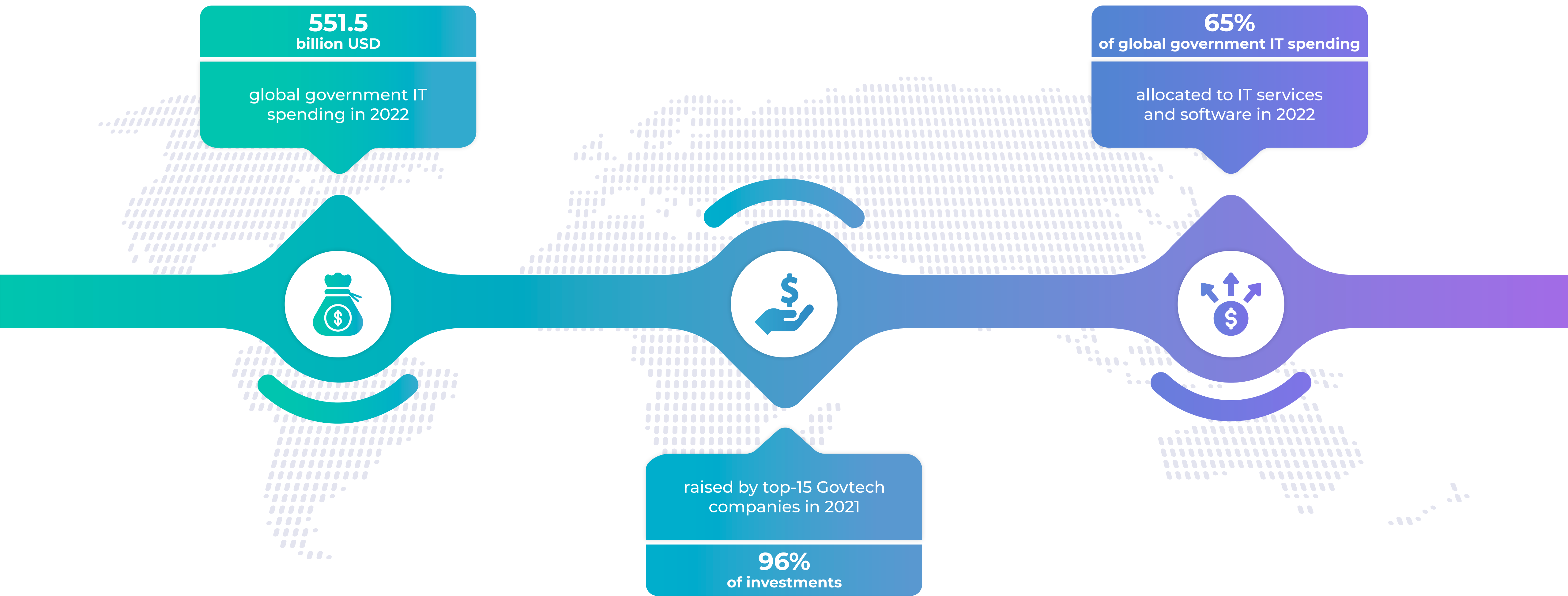
Govtech ecosystem

Government to employees

Government to business

Government to citizen

Government to government

Govtech solutions

Incubators and Accelerators

Developers

Investors

Consultants

Government

Citizens

Financing

Works and services

Consumption

Market
highlights

Market highlights

551.5
billion USD

global government IT
spending in 2022

65%
of global government IT spending

allocated to IT services
and software in 2022

raised by top-15 Govtech
companies in 2021

96%
of investments

Market highlights

The growth of government IT spending in 2022 demonstrates that the modernization of IT infrastructure and digital transformation of government remain the top priorities. Every year, an increasing share of the world's population gains access to the Internet, and digital literacy is on the rise. As a result, the global demand for online public services is booming, and the services themselves are continuously transforming.
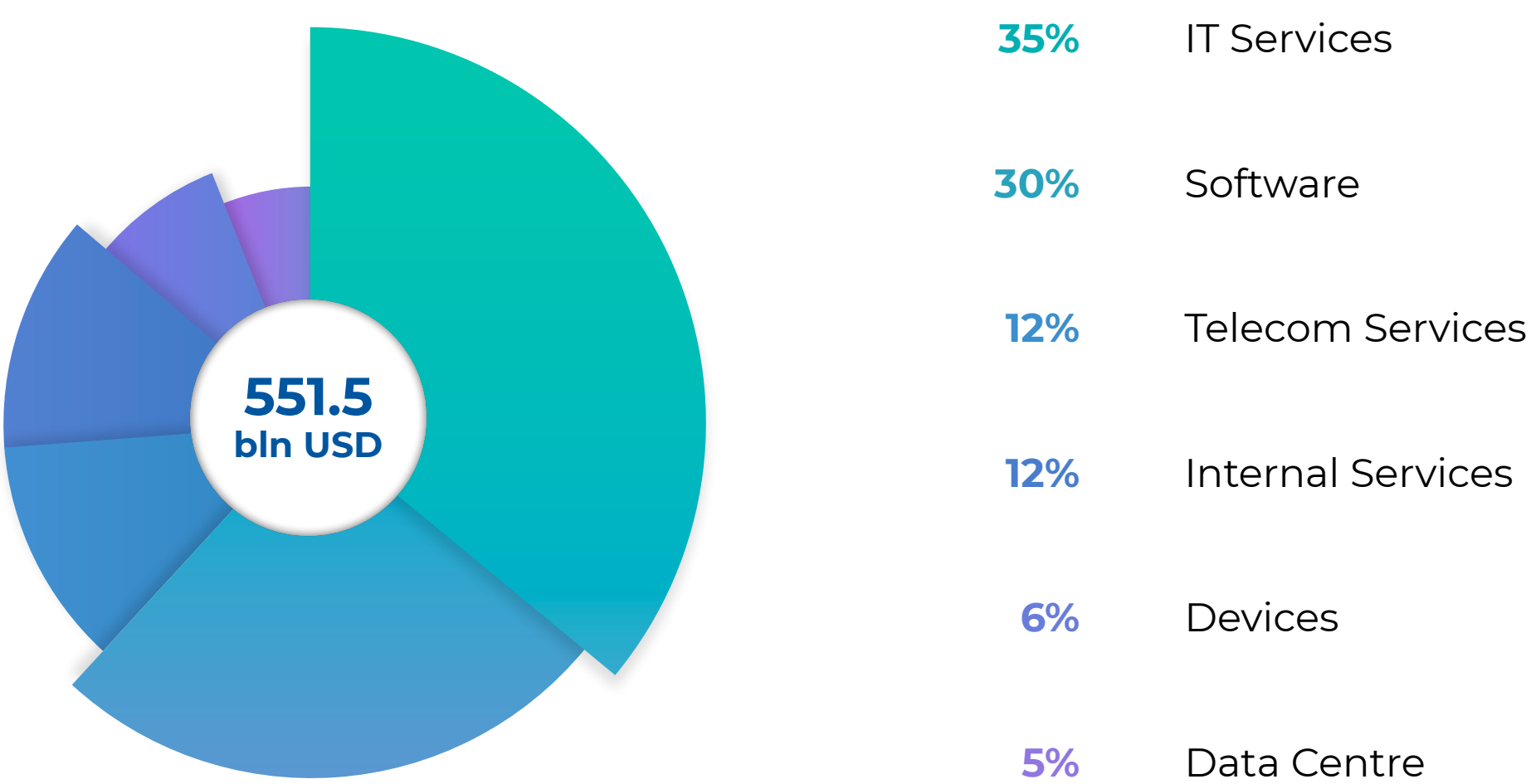
In the modern context, governments focus on IT services and relevant software, as evidenced by the structure of their spending on Govtech solutions. The vast majority of Govtech companies worldwide work in the e-government and healthcare sub-sectors, as these areas are in the most significant demand.
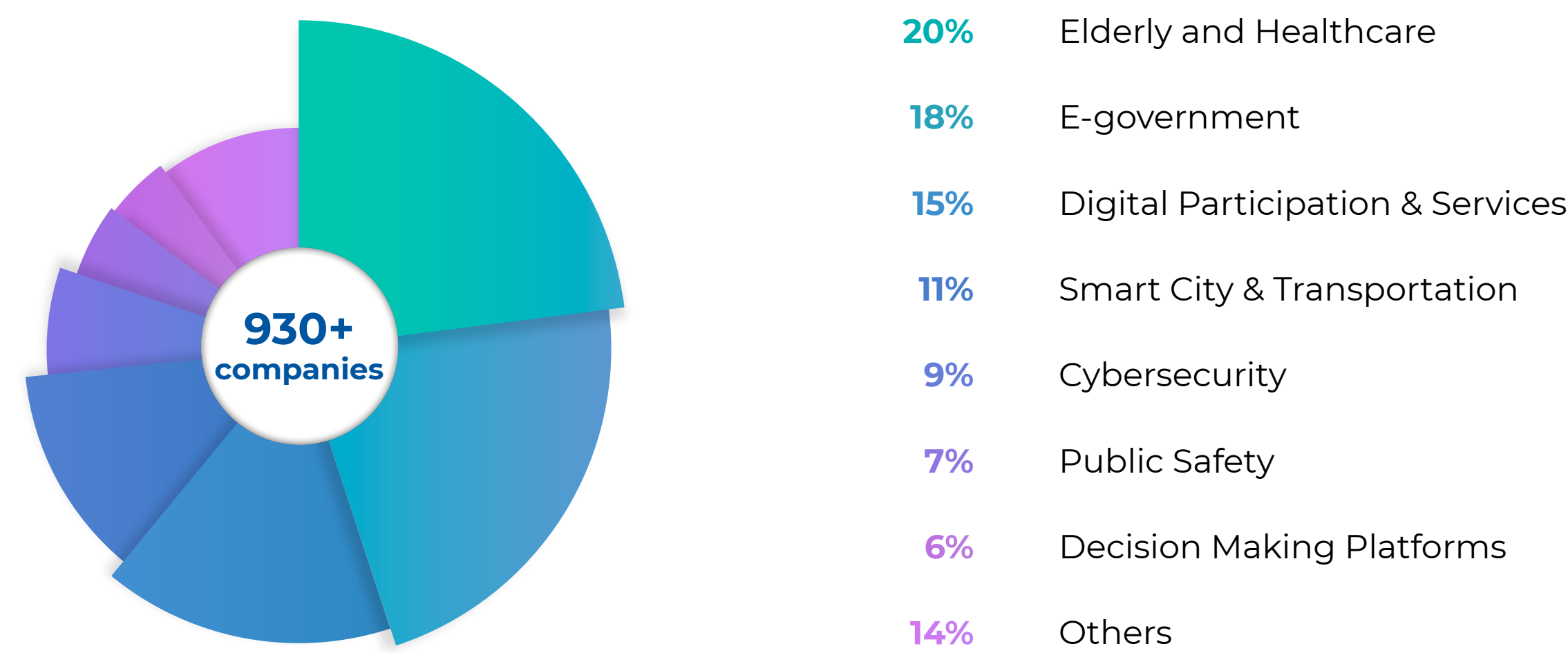
Global government IT spending

bln USD

Year	Spending
2018	423.5
2019	440.1
2020	437.7
2021	535.4
2022	551.5
2023 (forecast)	589.0
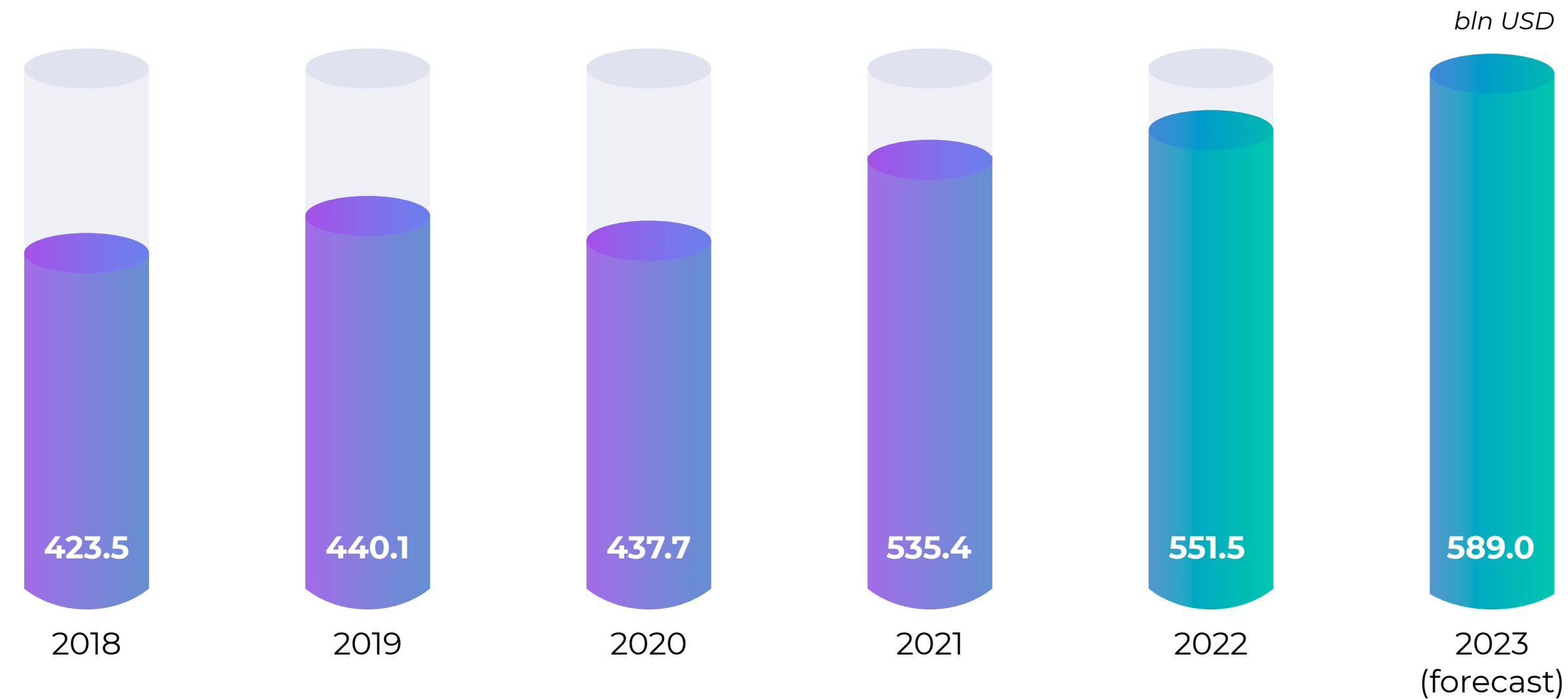
Sources: "Forecasts Global Government IT Spending to Grow 5% in 2021", "Forecasts Global Government IT Spending to Grow 5% in 2022"; "Forecasts Worldwide Government IT Spending to Grow 6.8% in 2023", Gartner

Government IT Spending by Segment Worldwide 2022

551.5 bln USD

%	Segment
35%	IT Services
30%	Software
12%	Telecom Services
12%	Internal Services
6%	Devices
5%	Data Centre

Source: "Forecasts Worldwide Government IT Spending to Grow 6.8% in 2023", Gartner

Govtech Sub-sectors by the Number of Companies Worldwide, Q2 2022

930+ companies

%	Sub-sector
20%	Elderly and Healthcare
18%	E-government
15%	Digital Participation & Services
11%	Smart City & Transportation
9%	Cybersecurity
7%	Public Safety
6%	Decision Making Platforms
14%	Others

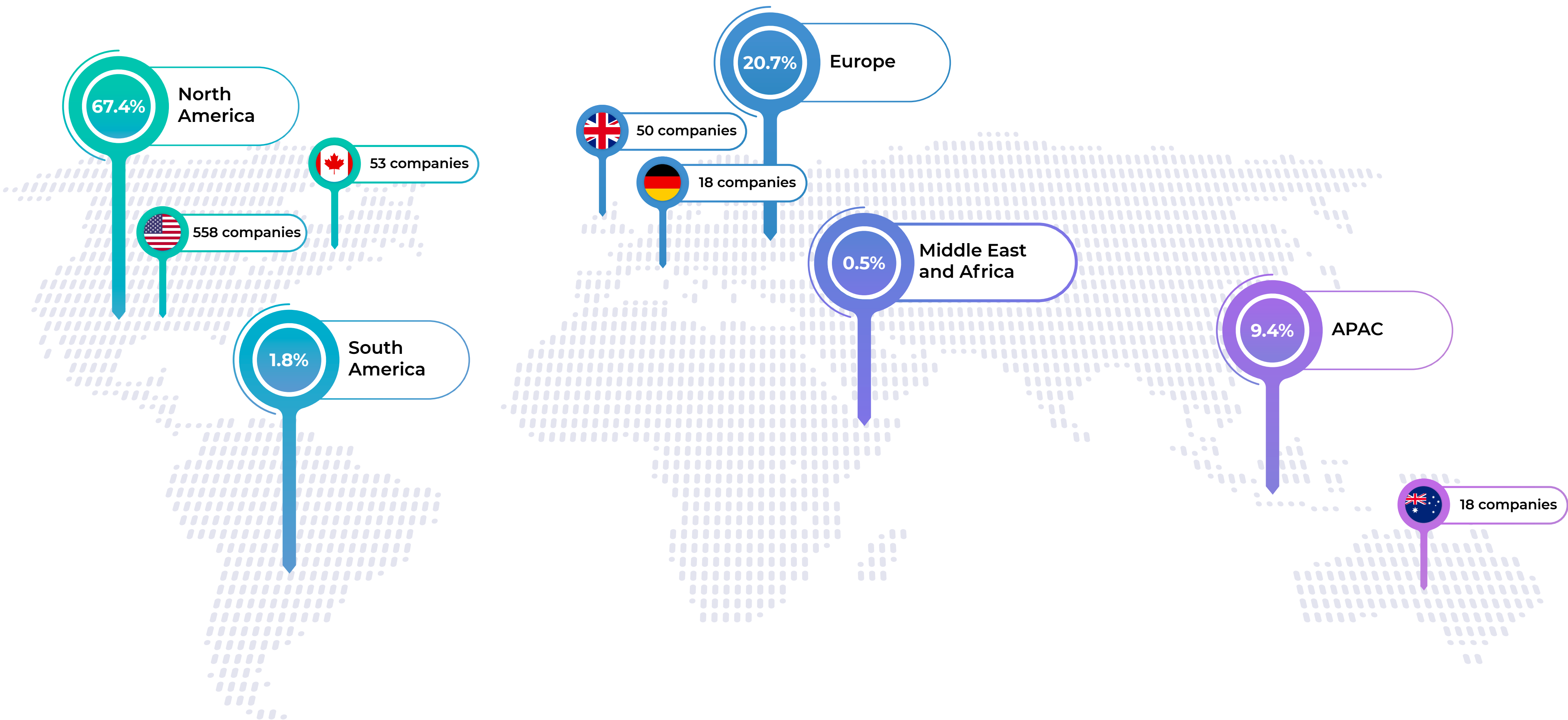Source: "Global Govtech Industry Landscape Overview Q2 2022", Deep Knowledge Analytics

Competitive
environment

Competitive environment

North America is the dominant region in the number of Govtech companies. The leadership can be explained by the high demand for digital transformation, which has increased dramatically due to the COVID-19 pandemic. According to the Global Govtech Industry Landscape Overview 2022, only 10 Govtech companies worldwide have market capitalization exceeding USD 2.4 billion, and 8 of them are based in the United States.

Regional distribution of Govtech companies

67.4% North America

53 companies

558 companies

1.8% South America

20.7% Europe

50 companies

18 companies

0.5% Middle East and Africa

9.4% APAC

18 companies

Competitive environment

Largest companies by capitalization, beginning of 2022

	JINOI	tyler technologies	AXON	VARONIS	McAfee
💰 **Capitalization, bln USD**	75.8	18.4	9.9	5.3	4.9
🤝 **Country**	China	USA	USA	USA	USA
🕐 **Year of foundation**	2006	1966	1993	2005	1987
🔀 **Sub-sector**	Health Tech	Software and technology for public sector	Security	Cybersecurity	Cybersecurity
📄 **Description**	Provider of smart healthcare and smart health insurance solutions for the citizens	Software provider for the US public sector	Manufacturer of wearable cameras and related software for police officers	Security software platform that allows to monitor, visualize, analyse and protect unstructured data	Provider of antivirus software for individuals, businesses and governments

Source: «Global Govtech Industry Landscape Overview Q2 2022», Deep Knowledge Analytics

Competitive environment

Largest companies by capitalization, beginning of 2022

	BlackBerry	NIC	VERINT	VERRA MOBILITY	Itron
Capitalization, bln USD	4.1	3.4	3.4	2.4	2.4
Country	Canada	USA	USA	USA	USA
Year of foundation	1999	1992	1994	2016	2007
Sub-sector	Cybersecurity	Software	Big Data	Smart City	Smart City
Description	Supplier of high-security mobile phones for the government	Provider of digital government services to federal and local public agencies in the United States	Data analysis software using artificial intelligence and cloud technologies, offers solutions to increase citizen engagement for municipalities	Provider of smart transport solutions	Tech company focusing on energy and water management in Smart City implementation

Source: «Global Govtech Industry Landscape Overview Q2 2022», Deep Knowledge Analytics

Investment
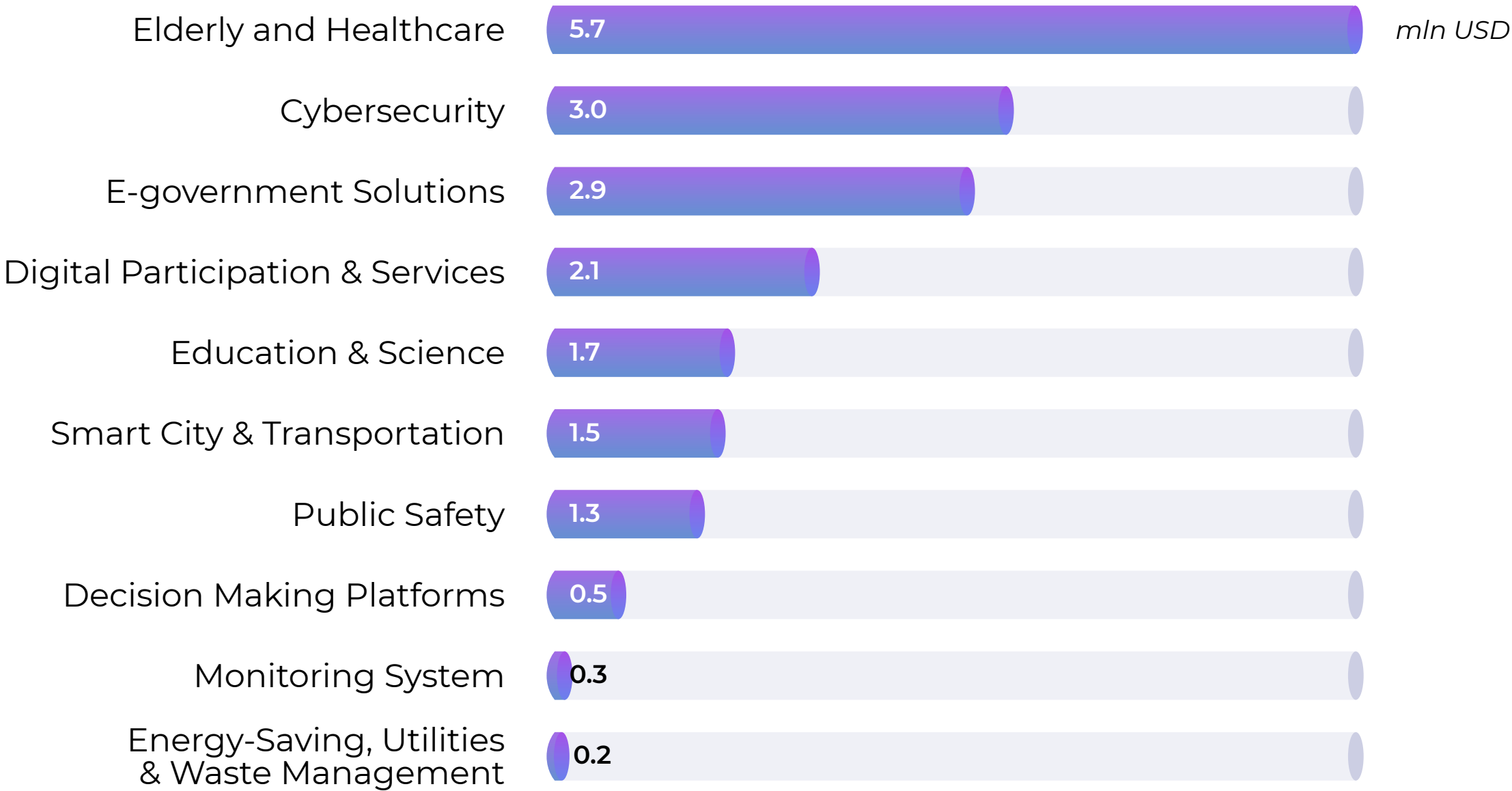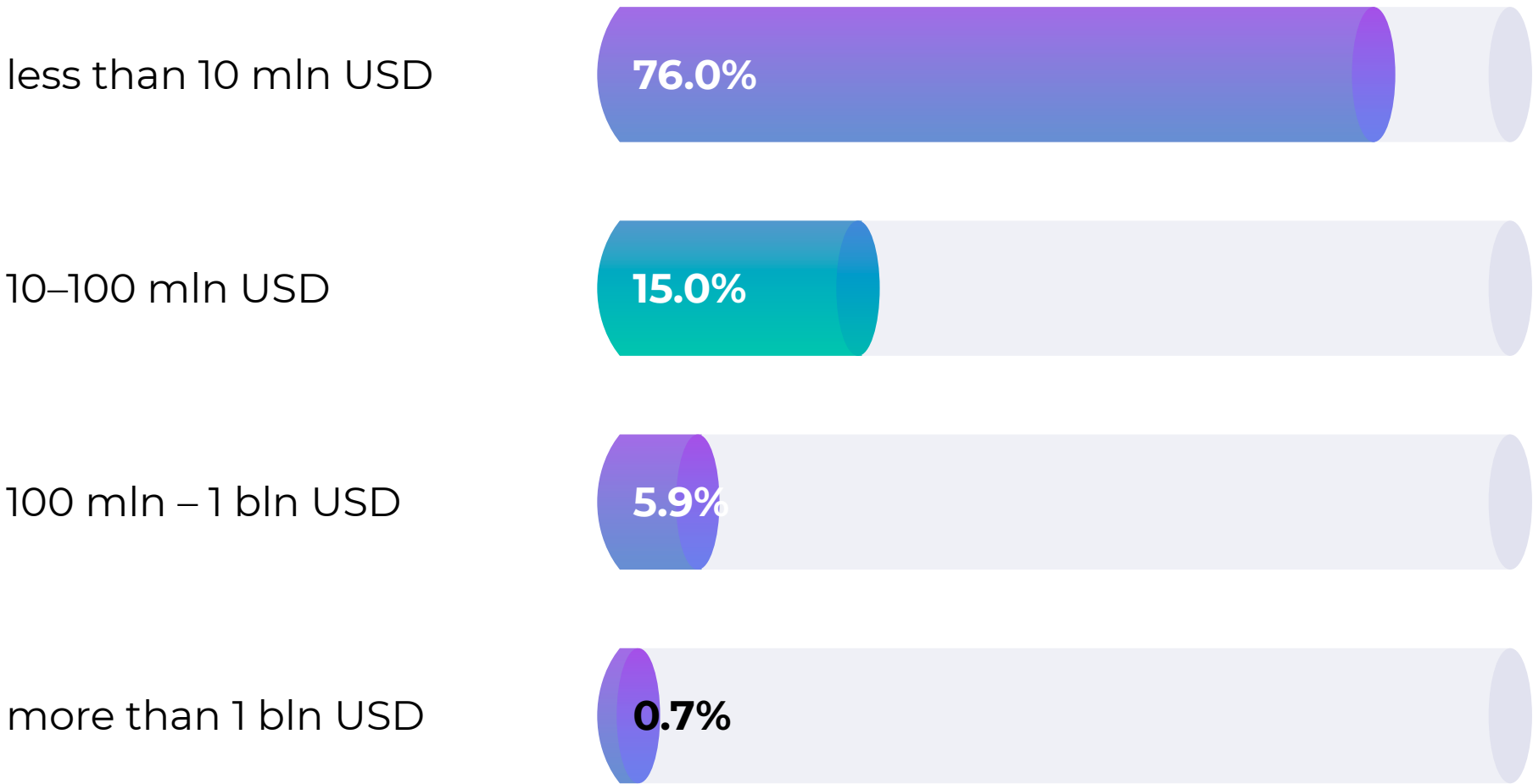## landscape

Investment landscape

< 10 mln USD

Such income is received annually by 76% of Govtech companies, as investors' interest is focused on well-known market giants that already have clients in the public sector. Such an approach poses a relatively high threshold for market entry and makes it difficult for startups to convince investors to finance their products.

Distribution of investments by sub-sectors in Q2 2022

Sub-sector	mln USD
Elderly and Healthcare	5.7
Cybersecurity	3.0
E-government Solutions	2.9
Digital Participation & Services	2.1
Education & Science	1.7
Smart City & Transportation	1.5
Public Safety	1.3
Decision Making Platforms	0.5
Monitoring System	0.3
Energy-Saving, Utilities & Waste Management	0.2

Breakdown of Govtech companies by estimated annual revenue, Q2 2022

Revenue	Percentage
less than 10 mln USD	76.0%
10–100 mln USD	15.0%
100 mln – 1 bln USD	5.9%
more than 1 bln USD	0.7%

Source: «Global Govtech Industry Landscape Overview Q2 2022», Deep Knowledge Analytics

Investment Landscape

Top 5 countries by the number of investors in Govtech
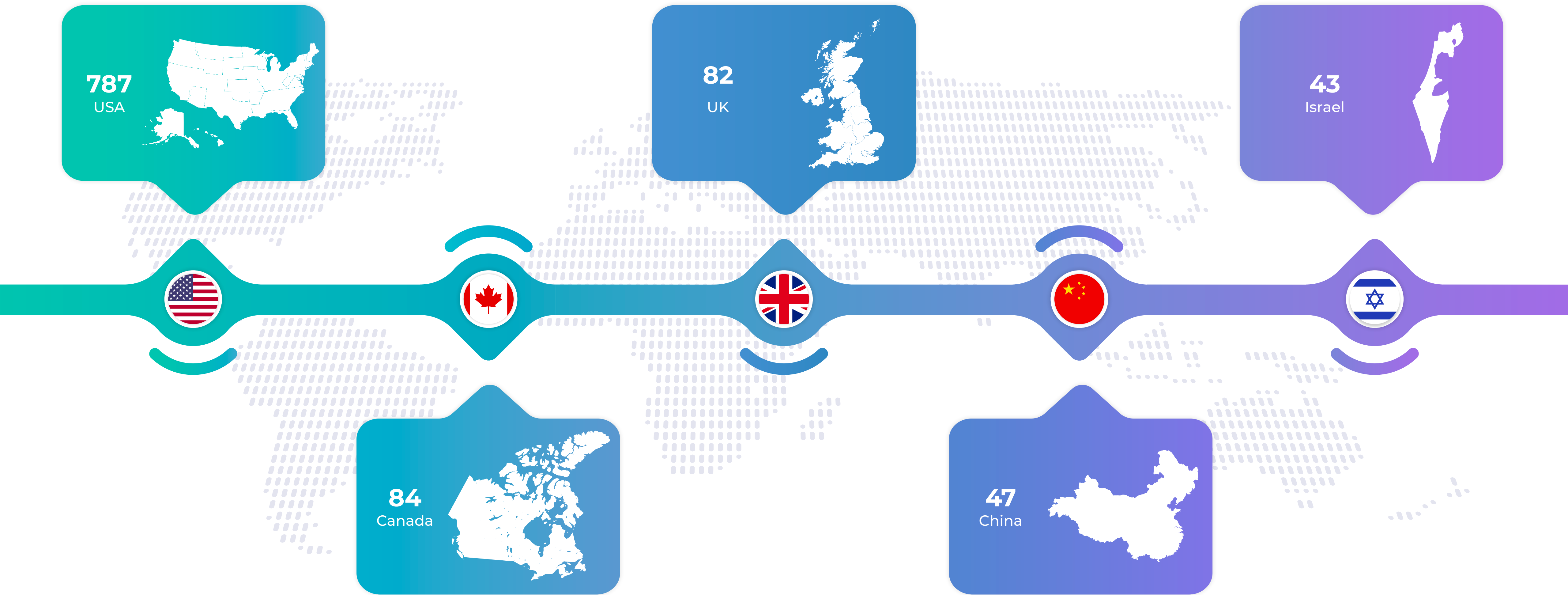
787
USA

82
UK

43
Israel

84
Canada

47
China

Investment Landscape

Top 5 deals of Govtech startups in 2021

		Funding Round	Brief description
ANDURIL	450	Series D	Developer of tech solutions for US military
VERRA MOBILITY	350	IPO	Provider of smart transportation solutions
CIVICPLUS	290	Private Equity	Developer of websites and software for local administrations
Cyxtera	250	IPO	Provider of data centres for creating cloud and hybrid infrastructure for Govtech solutions
MARK43	110	Series E	Developer of software for law enforcement agencies to collect, analyse and exchange information

million USD

Source: Crunchbase

Investment Landscape

Top 5 deals of Govtech startups in Q2 2022

	Funding Round	Brief description
pathlock — 200	Venture — Series Unknown	Provider of a single platform to unify access governance, automate audit and compliance processes, and fortify application security
payit — 90	Venture — Series Unknown	A provider of digital government services that simplifies business through its mobile transaction and payment platform
MERIT — 50	Series B	Develops a verified identity platform to help organizations in managing personnel data
Promise. — 25	Series B	Provides a modern payment processing platform built for utilities and government agencies
URBAN FOOTPRINT — 25	Series B	Urban, climate & community resilience data platform providing critical intelligence to institutions investing in the world's infrastructure

million USD

Regional
market features

Regional market features

USA

209.6 billion USD

IT spending of federal, state, and local agencies in 2021

62%

Govtech companies located in the USA

US share in global IT spending, 2022

39%

Govtech investors based in the USA

56%
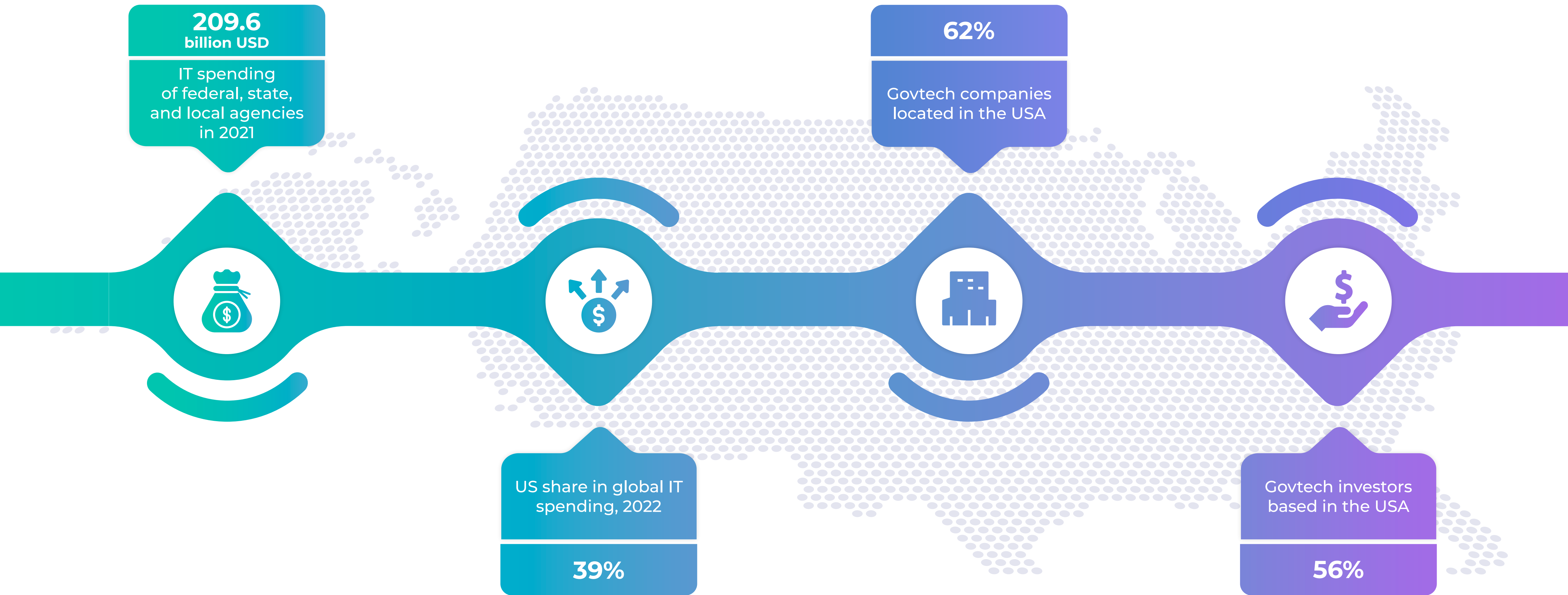
Regional market features

USA

The United States of America is the leader of the global Govtech market. The United States has a federal structure, so the digital transformation is underway simultaneously at the federal, state and local levels. Progress is visible at each level, with the federal government taking the lead at the system level and states innovating on specific digital initiatives. While federal IT spending seems substantial in 2021 at USD 90.9 billion, the Department of Defence spends more than one-third of this budget (USD 37.7 billion).

Historical US government IT spending

| | 179.7 | 186.4 | 194.6 | 200.3 | 209.6 | *bln USD* |

Year	Federal	State & Local
2017	78.4	101.3
2018	83.4	103
2019	87	107.6
2020	89.3	111
2021	90.9	118.7

● State & Local   ● Federal
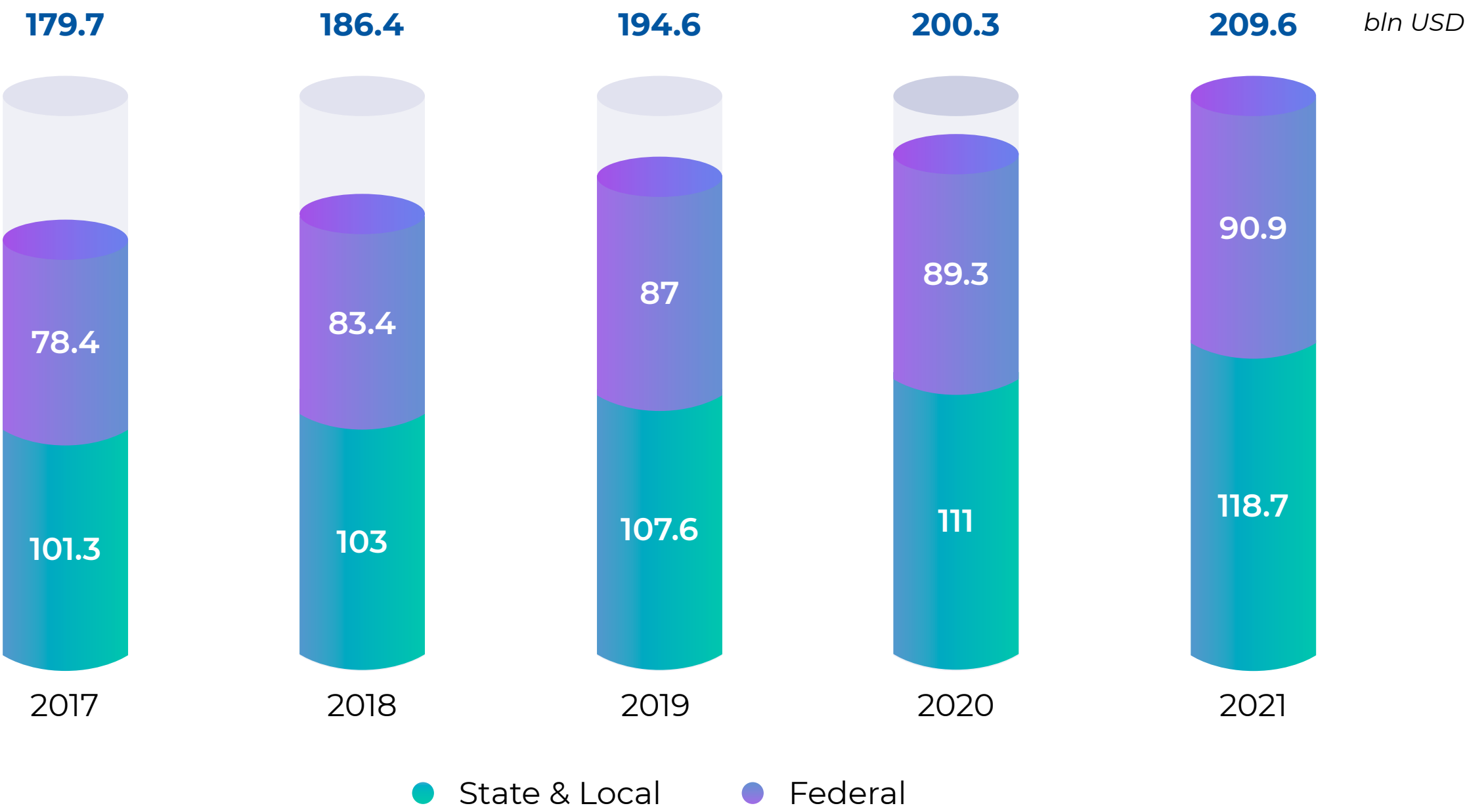
US government 2021 IT spending breakdown

209.6 bln USD

- **29%** State
- **28%** Local
- **25%** Federal without Department of Defence
- **18%** Department of Defence
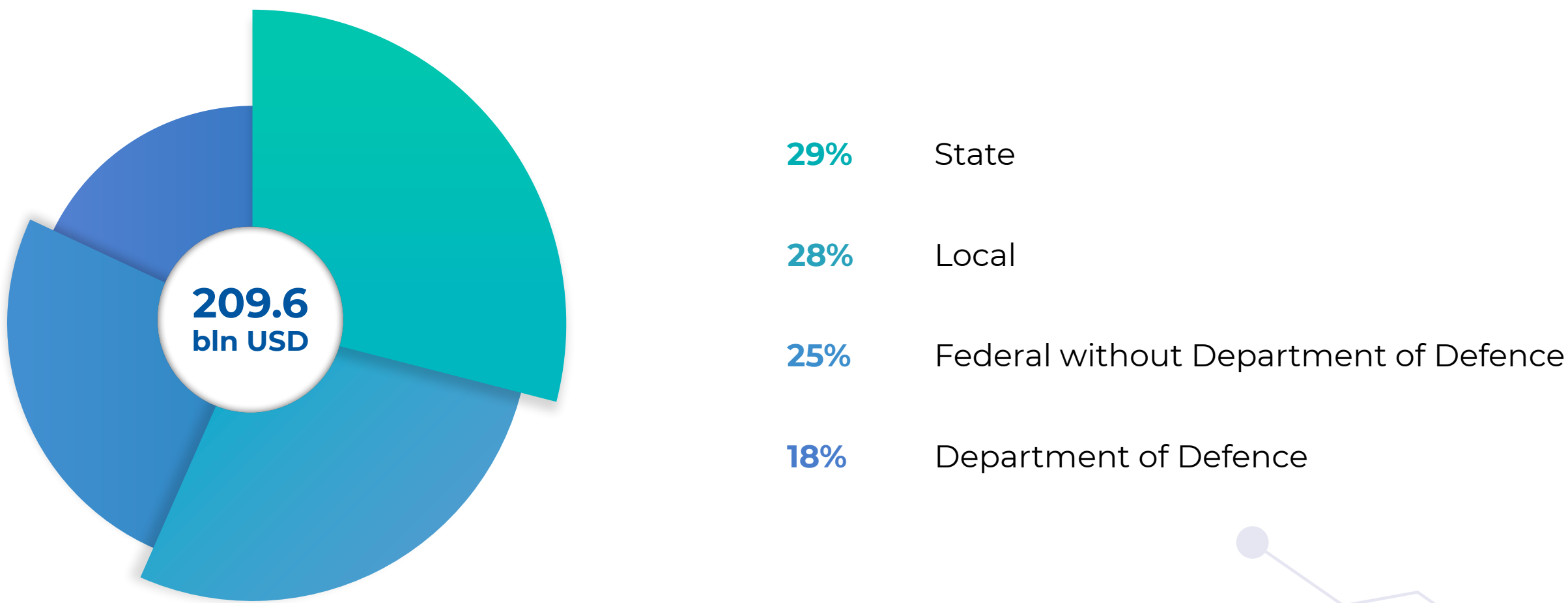
Regional market features

USA

The USA widely engages startups in improving the regulatory system. Since 2011, all states have been subject to a single federal risk management and authorization program, FedRAMP, which aims to facilitate cooperation between states and private companies. The program conducts preliminary assessments of companies seeking to contract with federal agencies.

In 2018, the USA adopted The 21st Century Integrated Digital Experience Act **(21st Century IDEA)**, a framework for federal agencies to improve websites and optimize the delivery of digital services. In particular, the Act requires all executive agencies to:

1. Modernize their websites
2. Digitize services and forms
3. Accelerate the use of e-signatures
4. Improve customer experience
5. Standardize and transition to centralized shared services

On December 13, 2021, the US President signed an order **Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government**, requiring government leaders to consider the public's experience applying for public services. New digital services from the government must be simple and accessible to everyone, as well as focused on people, not bureaucratic procedures.

Decision-making algorithm for procurement

Startups

Development

Govtech solutions

FedRAMP assessment. Procurement

Proposal

Government
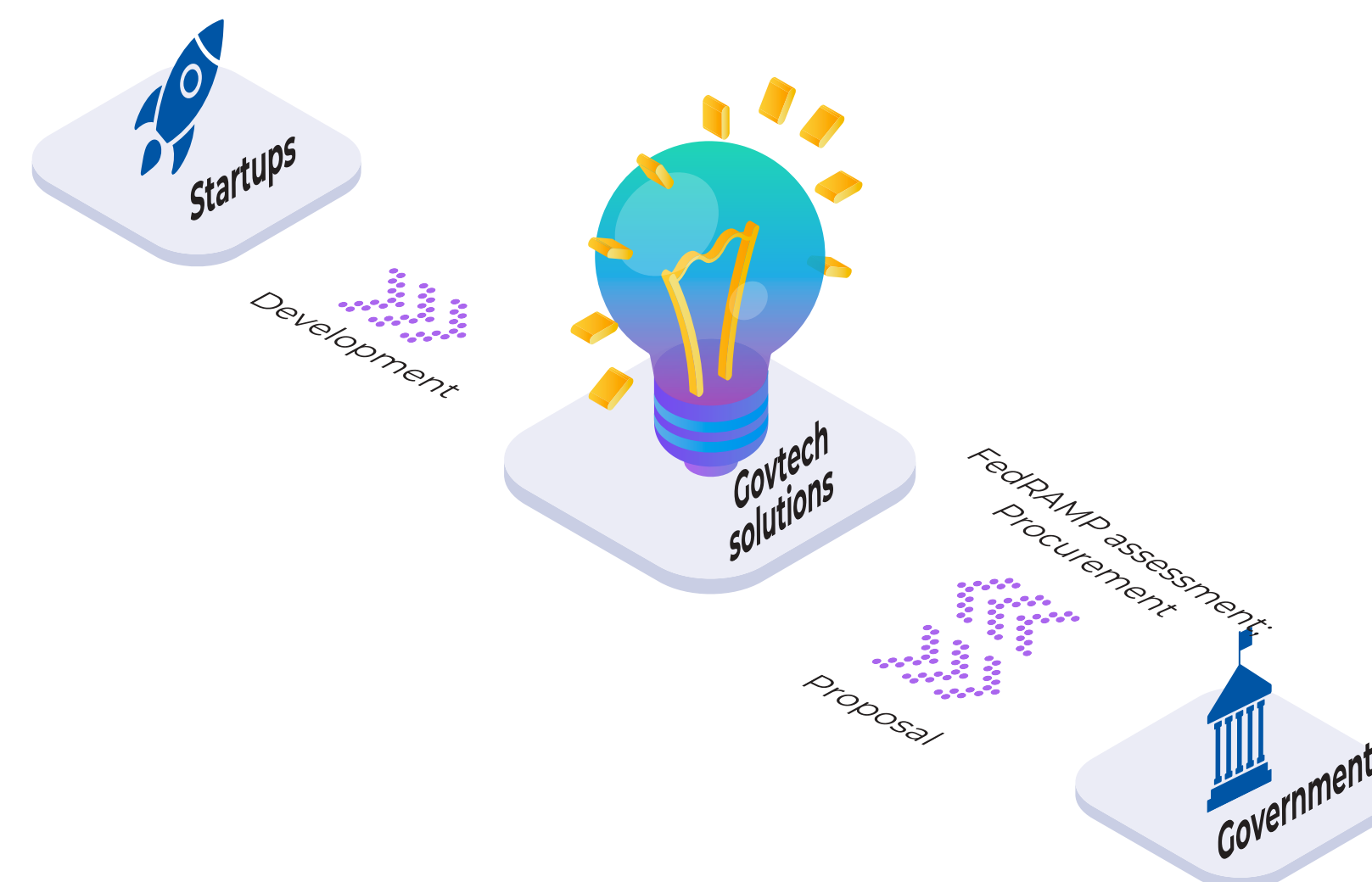
Regional market features

USA case: Voatz, App for voting

Solution name	Voatz
Initiator	Secretary of State of West Virginia
Executor	Voatz
Year	2018
Project's duration	3 months
Description	Implementation of mobile voting via blockchain service for citizens working or living abroad
Goal	Provide citizens with a simple and secure voting system to increase overall voter turnout
Results	• 144 people from 31 countries successfully used the app, and government officials were satisfied with the experiment's results and plan to use it again during the 2024 elections. • Denver, Colorado, Utah, and two Oregon counties have launched pilot projects during municipal elections, and 29 counties in 5 states have tested the Voatz mobile app for voting in official elections without experiencing any problems.

Regional market features

Europe[1]

116
bln EUR

the volume
of the European
Govtech market 2021

12
European countries

have regional
Govtech programs

share of the EU
population interacting
with the government
online

58%
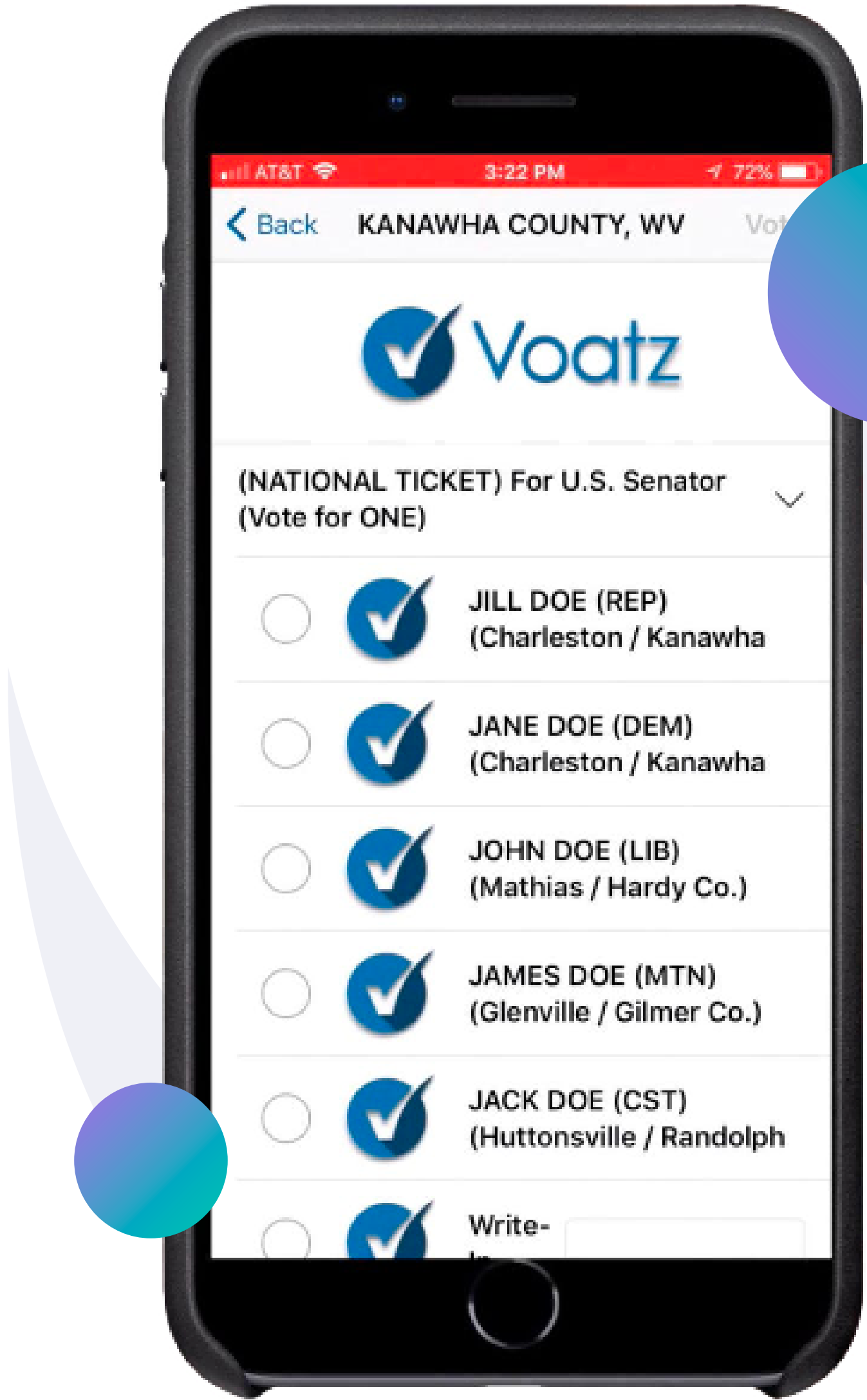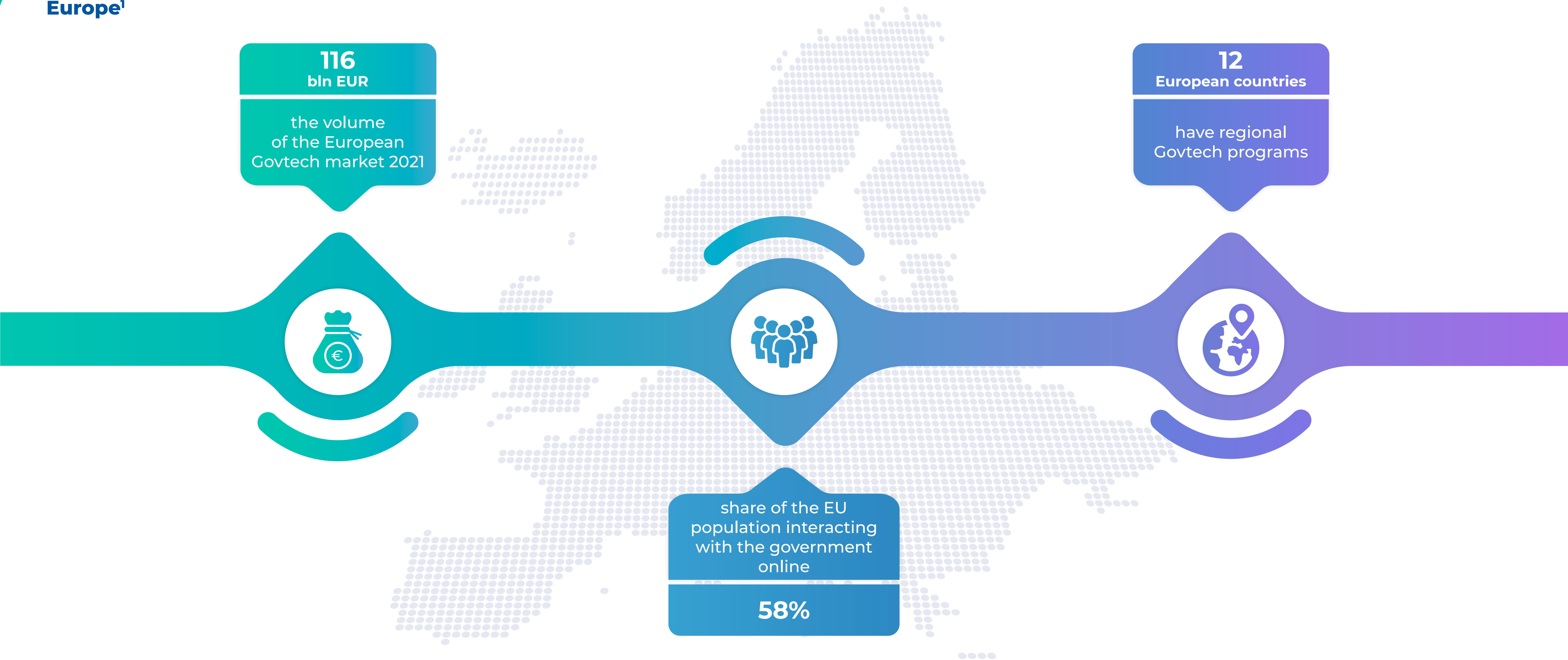
[1] In this report, Europe includes the 27 EU member states as well as the United Kingdom, Switzerland and Norway

Regional market features

Europe

COVID-19 became a powerful driver for the digital market pushing businesses and governments to move online faster. However, according to Eurostat, only 58% of EU citizens interacted with the government online in 2021, compared to the pre-COVID 53% in 2019. This figure is influenced not only by the low pace of digitalization of the government but also by the population's low level of digital literacy. According to Eurostat, in 2021, only 54% of the population aged 16 to 74 had at least basic general digital skills. Therefore, citizens often receive online public services through the help of relatives, friends or neighbours.

European Govtech market size in 2021

116 bln EUR

17%   Germany

15%   France

10%   UK

4%   Netherlands

54%   Others
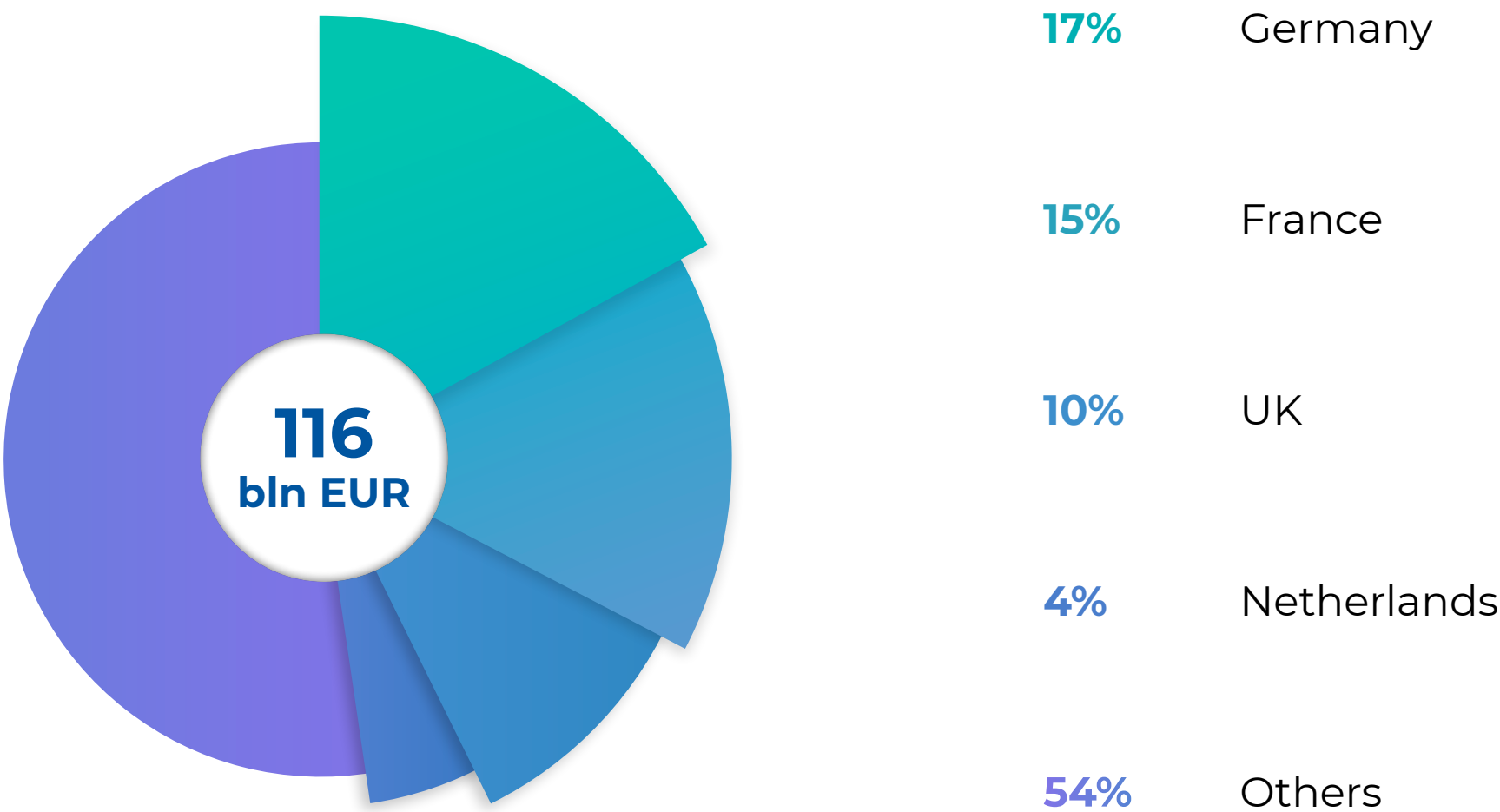
Source: «The State of European Govtech 2021», Public

Population interacting with the government online and having at least basic digital skills

EU (27 countries) — 58% / 54%

Iceland (EU member) — 94% / 81%

Norway (non-EU member) — 92% / 79%

Switzerland (non-EU member) — 83% / 78%

● E-government activities of individuals via websites   ● Individuals' level of digital skills
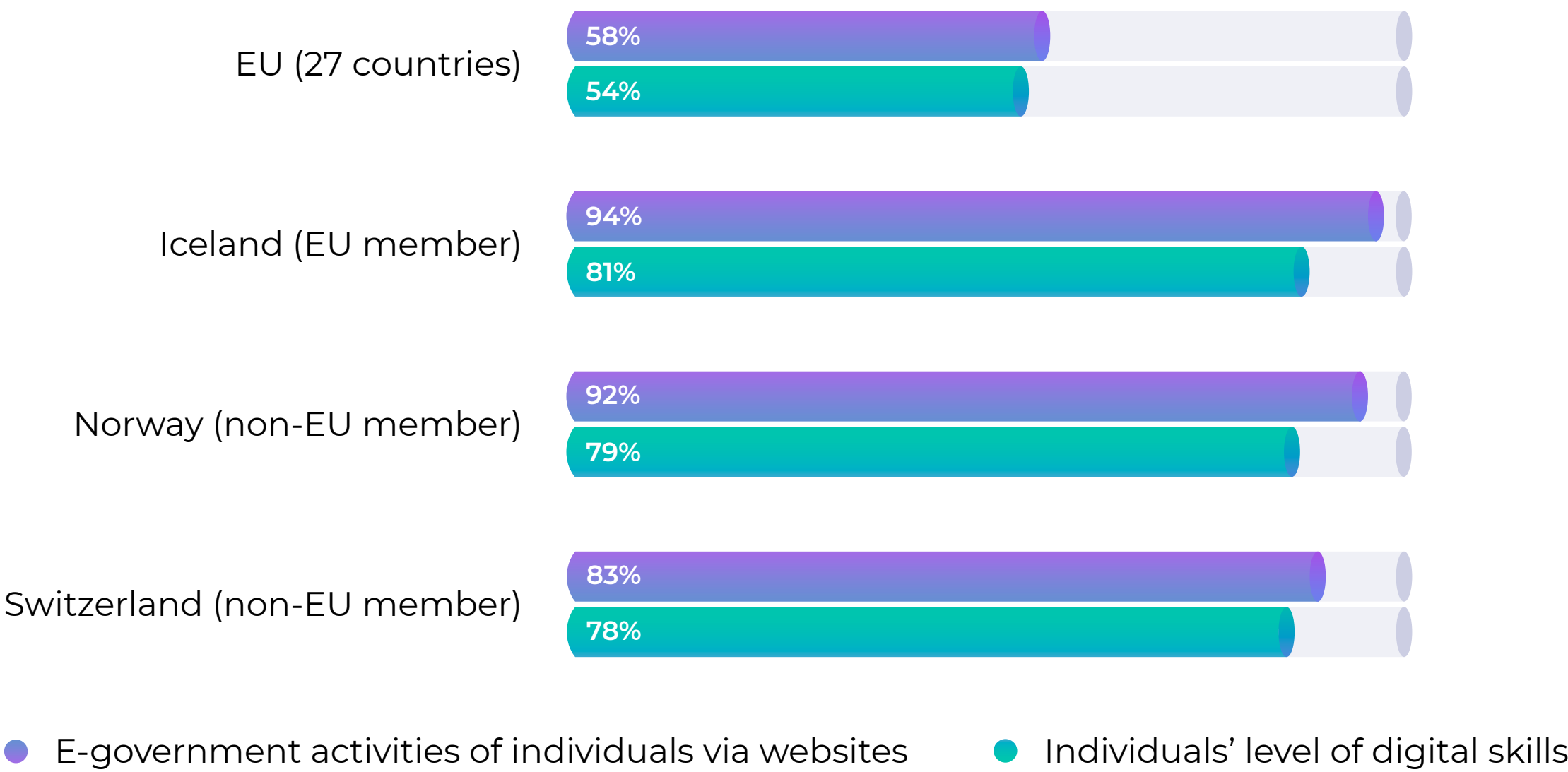
Source: Eurostat

Regional market features

Europe

In 2021, Europe had 14 national programs for implementing Govtech solutions, such as government programs or strategies aimed at implementing solutions to deliver digital public services. Half of them were adopted in 2018-2019. Govtech company PUBLIC predicts that by 2025 almost all European countries will have similar programs.

All programs have different development and implementation histories. Some countries created special implementing bodies, others transferred the project to already functioning government agencies, and sometimes a non-governmental organization supported by the private and public sectors was created for implementation. However, every country seeks to tailor the world's leading Govtech solutions to implement its program.

Current European Govtech programs

National Digital Research Centre	National Competence Centre for Innovation Procurement	TechLeap	GovLab Austria
2009	**2013**	**2015**	**2016**

IE PublicTech Lab	UK Govtech Catalyst Fund	Govtech Polska	CivTech Scotland
2018			**2017**

Accelerate Estonia	Govtech Programme Denmark	Govtech Lab Lithuania	Achats Public Innovants
2019			

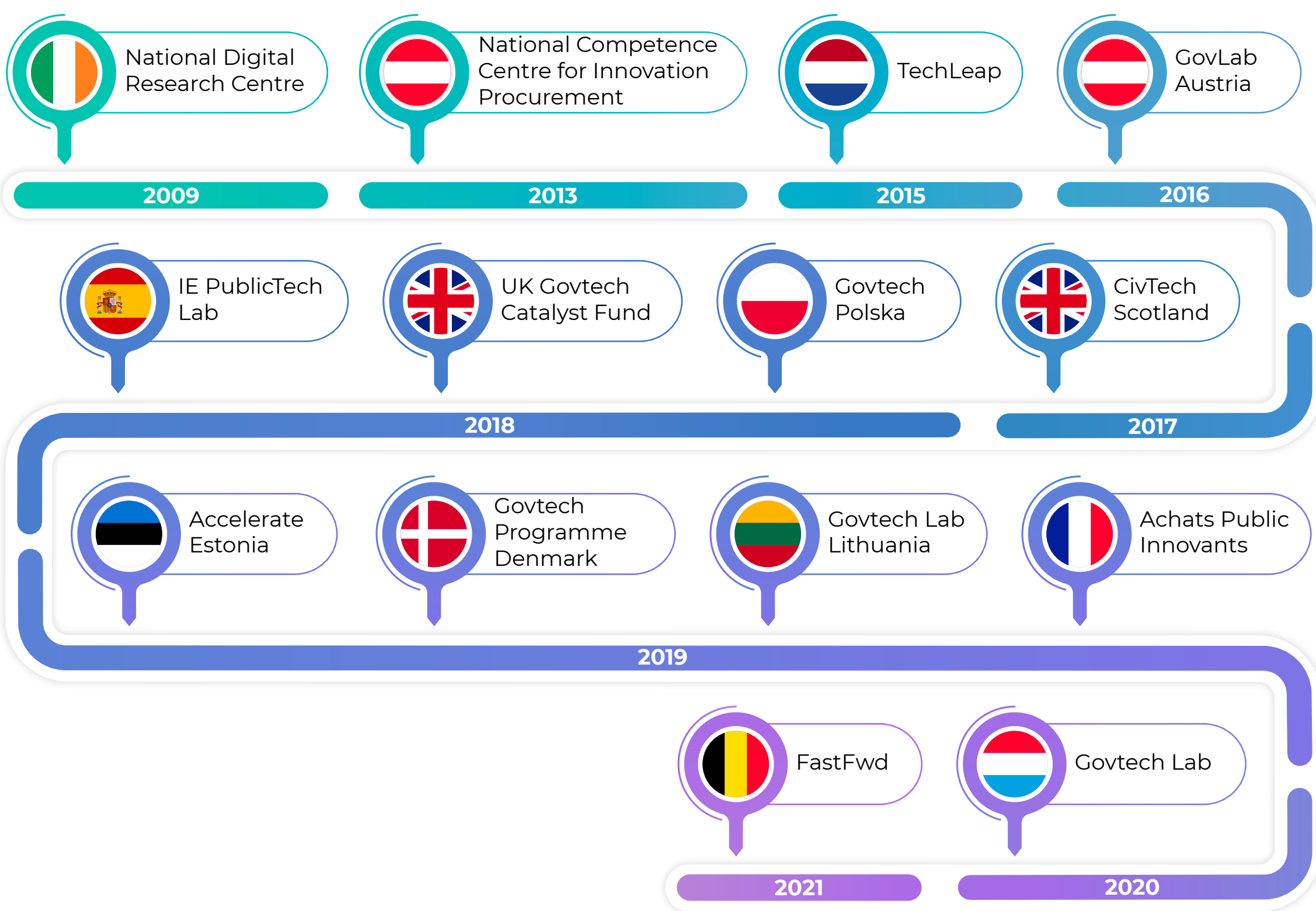| FastFwd	Govtech Lab
2021	**2020**

General characteristics of European programs

The main goal is to provide quality digital public services, modernize the existing IT infrastructure and solve current problems

The "grace period" is the first 3–4 years when financial results are not regarded. It allows experimentation and gives time to develop the project so that it can exist without further government support.

The initiators are dynamic entrepreneurs who either already work with similar programs internationally or have worked in the private sector and want to bring their experience to the public sector

The budget of the program is rather limited at the beginning of the project (up to EUR 1 million/year) and can be increased only after proving the effectiveness of the solution

Source: «Govtech Practices in the EU», Joint Research Centre

Regional market features

Germany's case: GovRadar, Procurement platform

Solution name	GovRadar
Initiator	GovRadar GmbH
Executor	GovRadar GmbH
Year	2020
Project's duration	Ongoing
Description	A platform that helps government bodies to conduct public procurement in an automated and compliant manner. The SaaS solution generates tender documents in a couple of clicks rather than manually taking months.
Goal	To improve the efficiency of public procurements in Germany and create the leading public procurement platform in Europe
Results	8,500 hours were saved over the year of operation as the previous process of describing the service took a lot of time, but now the platform generates it automatically

Regional market features

Asia

120
bln EUR

government IT spending in the Asia-Pacific region

18

Asian countries have national Govtech programs

population of the Asia-Pacific region receiving public services online

77%
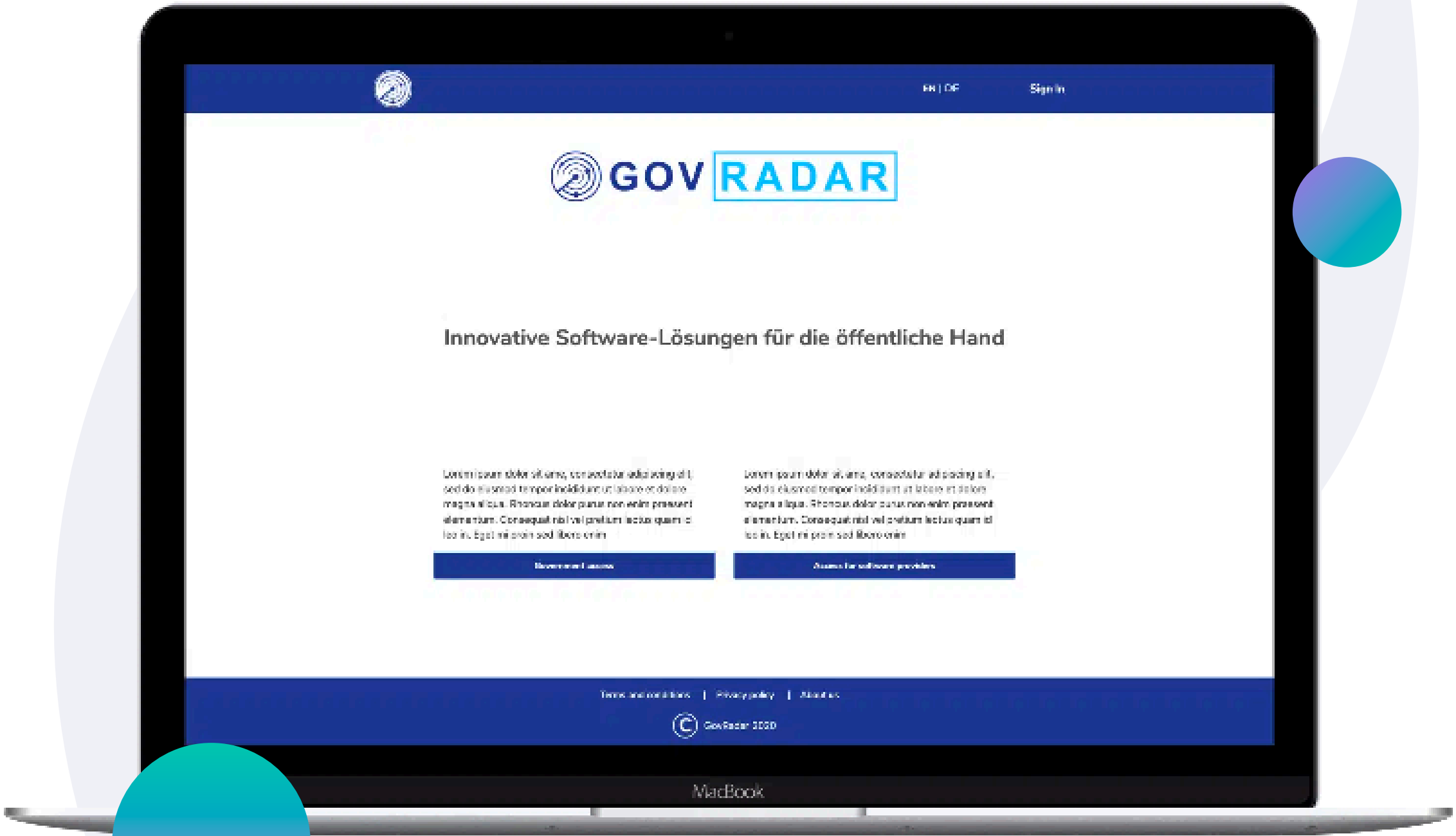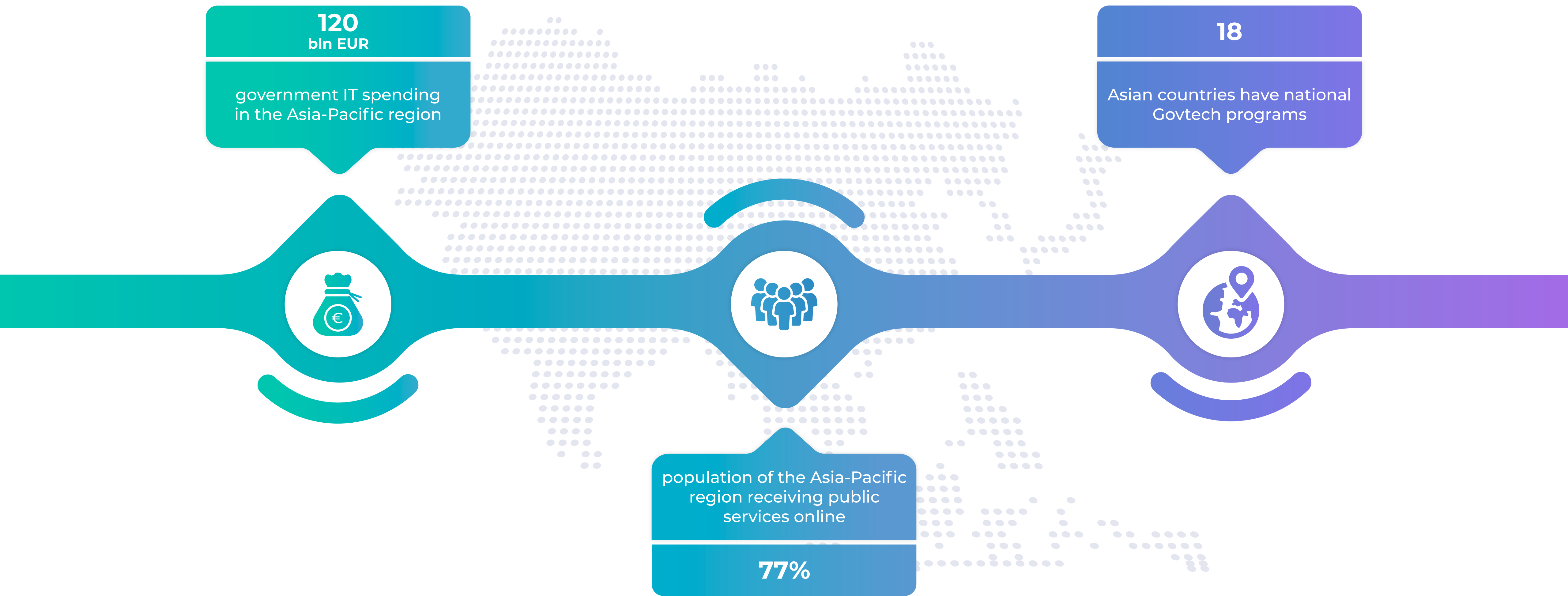
Regional market features

Asia

Asia is a diverse region where the world's fastest-growing economies (South Korea, Japan and Singapore) and the least developed countries (Laos and Myanmar) coexist.

According to the APNIC Foundation, less than half of Asia-Pacific's population (48.4%) has Internet access. At the same time, according to Statista, the region is home to 50% (about 3 billion) of the world's Internet users. The largest portion of Internet users is concentrated in East and South Asia and the smallest in Central Asia. The level of economic development of the regions and the population density cause such a distribution.

Although the rapid development of the digital economy in the region is driving the emergence of cutting-edge technology startups eventually becoming "unicorns", Asia primarily adheres to a closed model, where all government digital services are either developed in-house or involving large software companies.

Government IT spending in Asia-Pacific region

bln USD

+8%   +8%   +8%

2022	2023	2024	2025
120			151
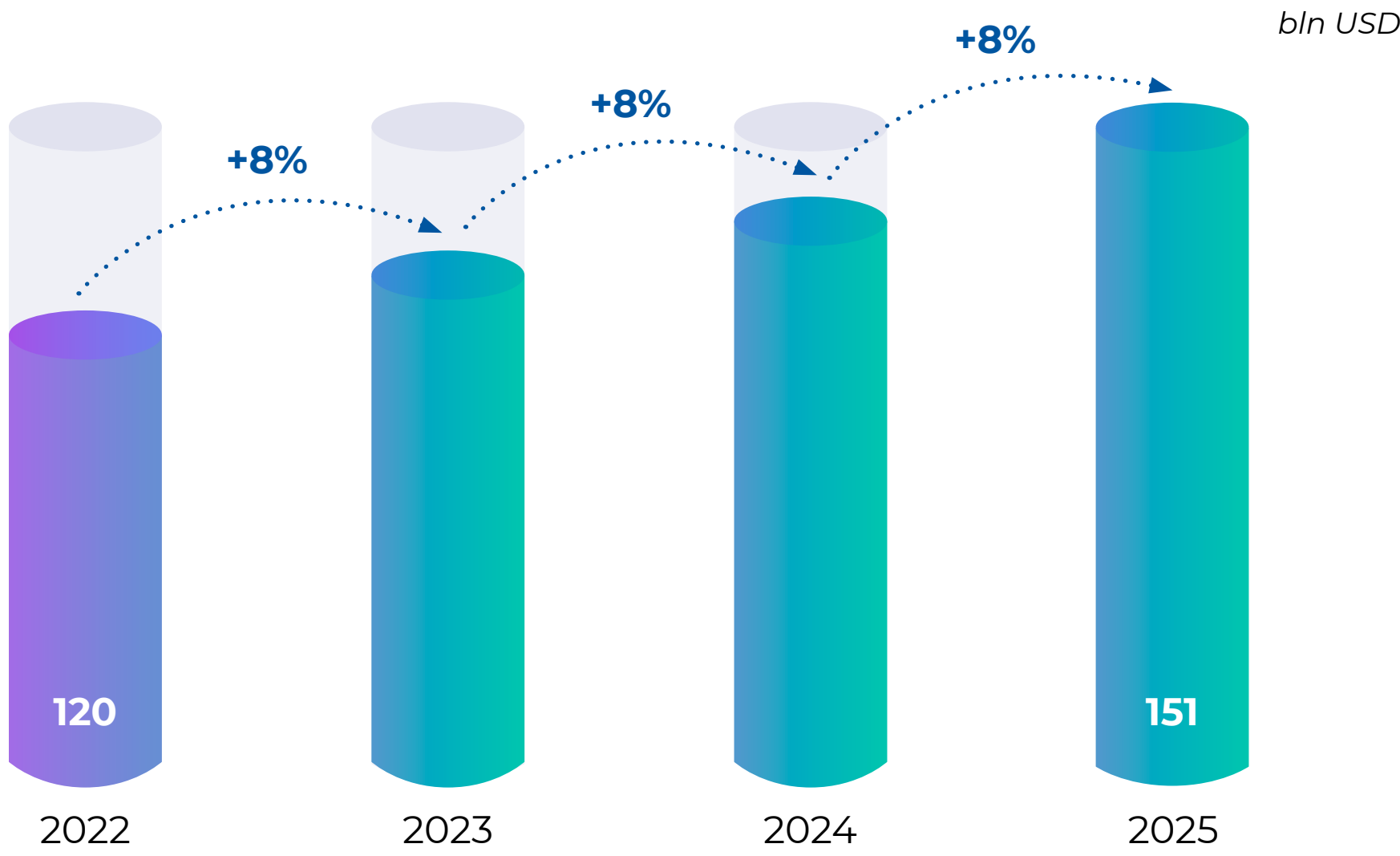
Source: «Digital smart: Accelerating digital government for citizens in the Asia-Pacific», Deloitte

Decision-making algorithm for procurement

Government → Terms of reference → Govtech developer → Development → Govtech solution → Attestation → Government → Delivery → Public institutions
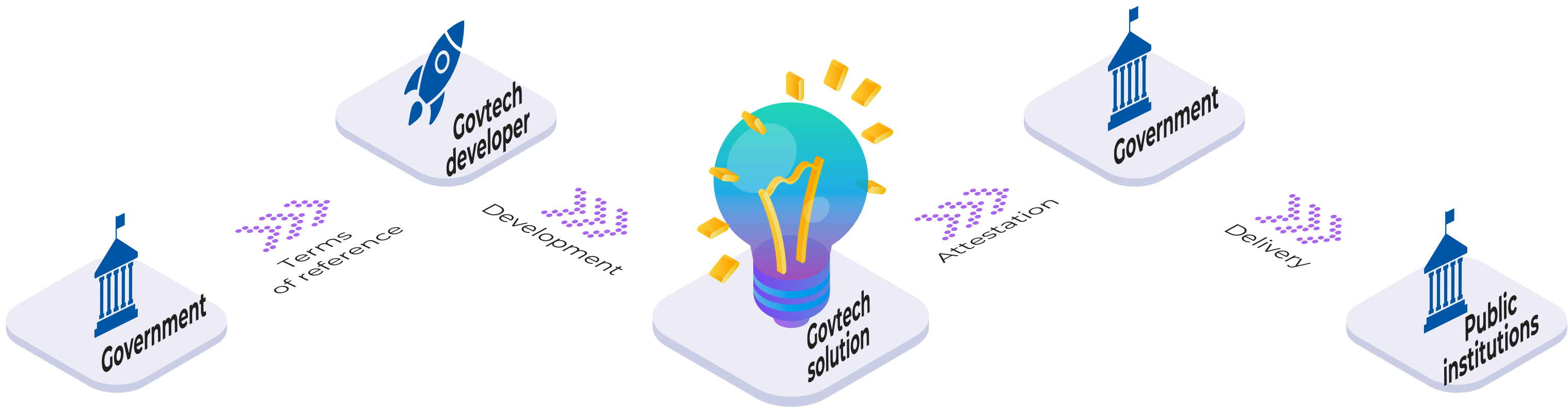
Regional market features

Asia

Most countries in Asia have already adopted digital strategies or programs, which primarily focus on data management, cybersecurity, and introducing more digital methods of interaction with citizens.

Map of Asian national digitization programs

- Digital Kazakhstan
- Digital Uzbekistan 2030
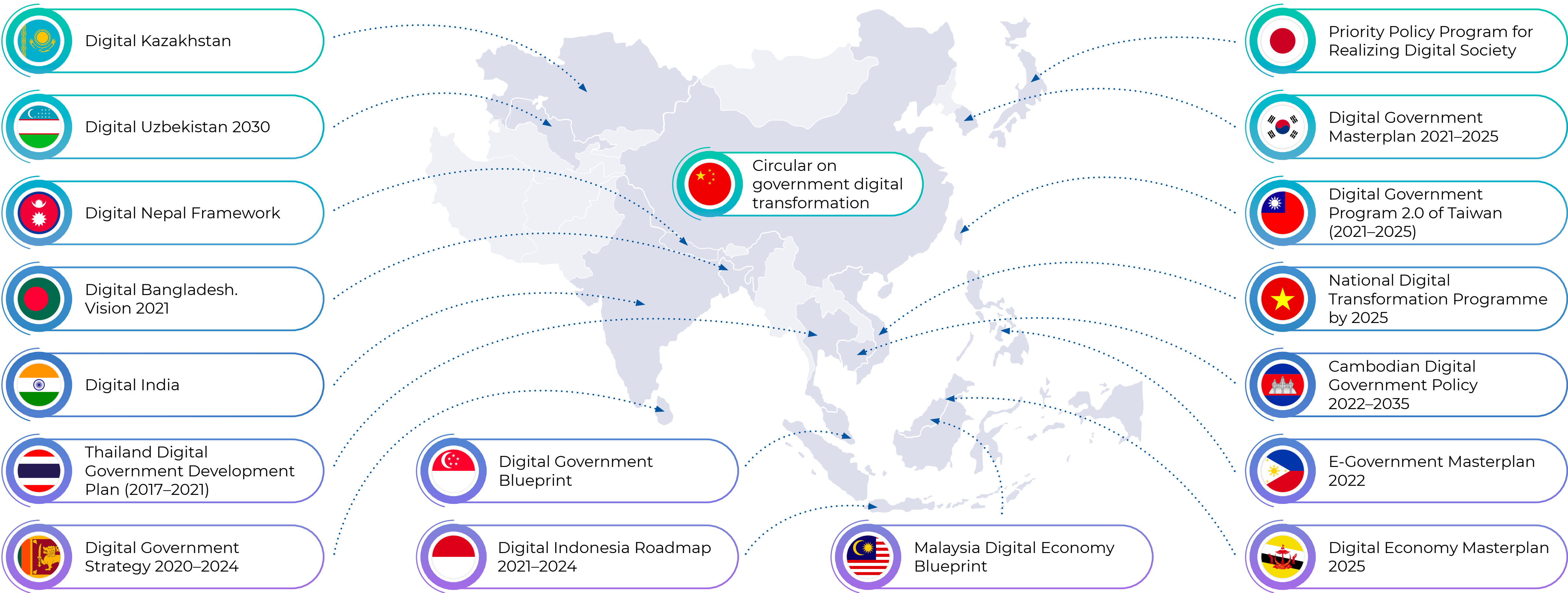- Digital Nepal Framework
- Digital Bangladesh. Vision 2021
- Digital India
- Thailand Digital Government Development Plan (2017–2021)
- Digital Government Strategy 2020–2024
- Digital Government Blueprint
- Digital Indonesia Roadmap 2021–2024
- Malaysia Digital Economy Blueprint
- Circular on government digital transformation
- Priority Policy Program for Realizing Digital Society
- Digital Government Masterplan 2021–2025
- Digital Government Program 2.0 of Taiwan (2021–2025)
- National Digital Transformation Programme by 2025
- Cambodian Digital Government Policy 2022–2035
- E-Government Masterplan 2022
- Digital Economy Masterplan 2025

34

Regional market features

Asia

Singapore is a leader in the region; the country has the Government Technology Agency of Singapore (Govtech Singapore) dedicated to empowering citizens through Infocomm technology and related engineering technologies. The agency employs more than 700 in-house developers who create products for citizens, companies, and the government, while also leading strategic national projects.

403 mln USD — Singapore government IT spending in 2021

94% — of government services in Singapore are available online
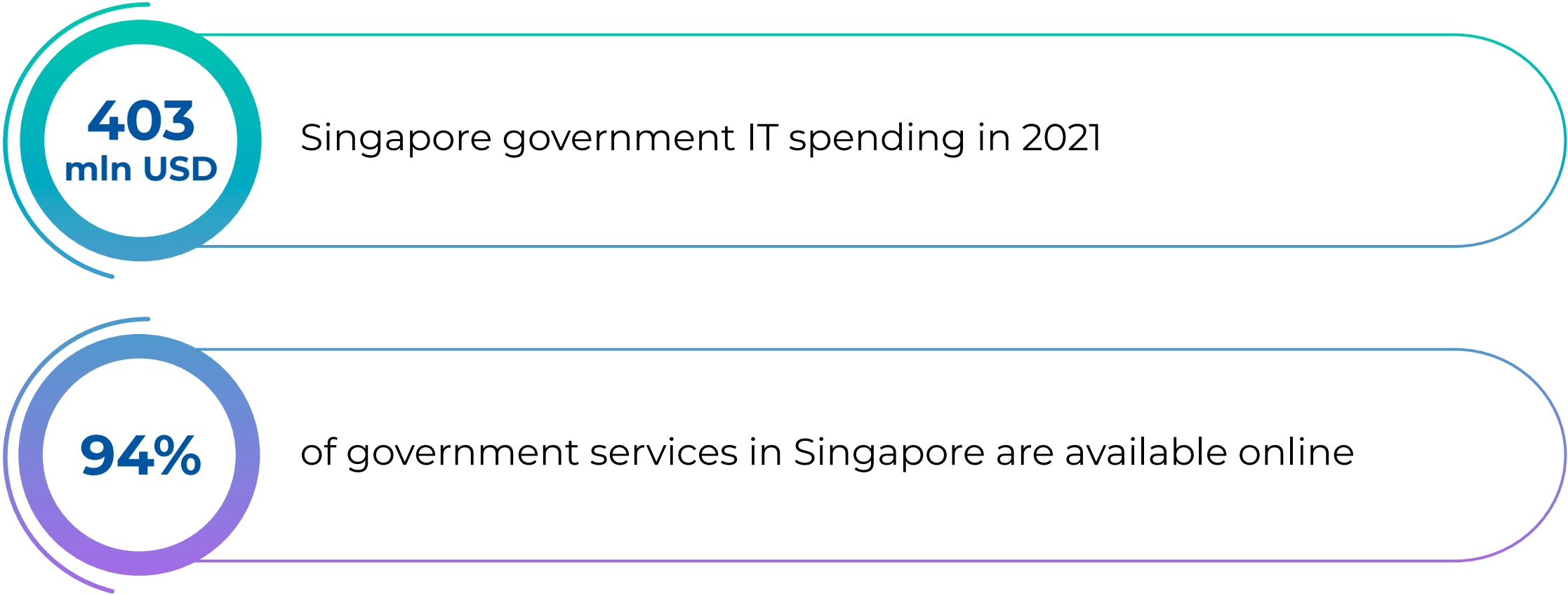
Nationwide Govtech initiatives in Singapore

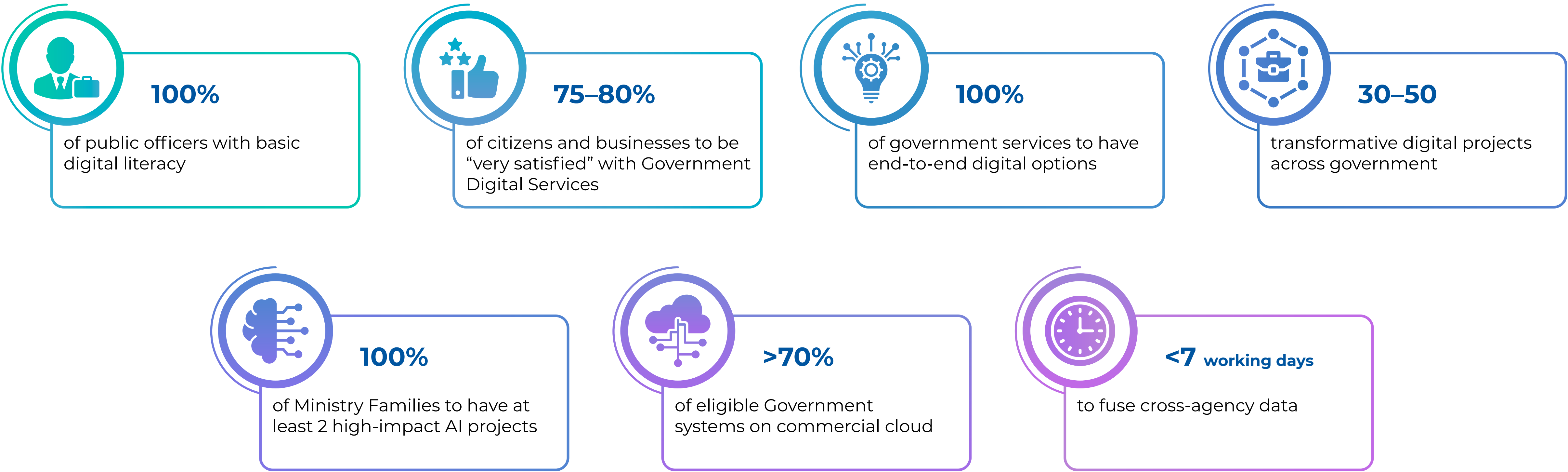|	Smart Nation	Singapore Government Technology Stack
Year of introduction	2014	2018
Description	A strategic initiative to procure services from technology startups rather than provide grants to support them	A self-service platform for agencies to build their digital applications faster and create a more consistent user experience

Regional market features

Asia

In 2018, the Singapore government adopted the first version of the Digital Government Blueprint (DGB), which outlines the path of digital government development. Some KPIs were achieved in 2019, but due to COVID-19, the plan was updated in 2020, and new objectives were set until 2023.

DGB 2023 objectives

100%
of public officers with basic digital literacy

75–80%
of citizens and businesses to be "very satisfied" with Government Digital Services

100%
of government services to have end-to-end digital options

30–50
transformative digital projects across government

100%
of Ministry Families to have at least 2 high-impact AI projects

>70%
of eligible Government systems on commercial cloud

<7 **working days**
to fuse cross-agency data

Regional market features

Singapore's case: The Ideas! Crowdsourcing platform

Solution name	The Ideas!
Initiator	Govtech Singapore
Executor	Govtech Singapore
Year	2014
Project's duration	Ongoing
Description	Crowdsourcing platform, currently including initiatives to engage with the real sector as well as collecting ideas for hackathons and offline initiatives
Goal	To develop the Singapore Govtech industry and improve the quality of public services
Results	• 7,574 participants submitted 1,284 ideas, completed 86 challenges and received 100 awards • Annual savings generated by the platform are estimated at over S$0.5 million
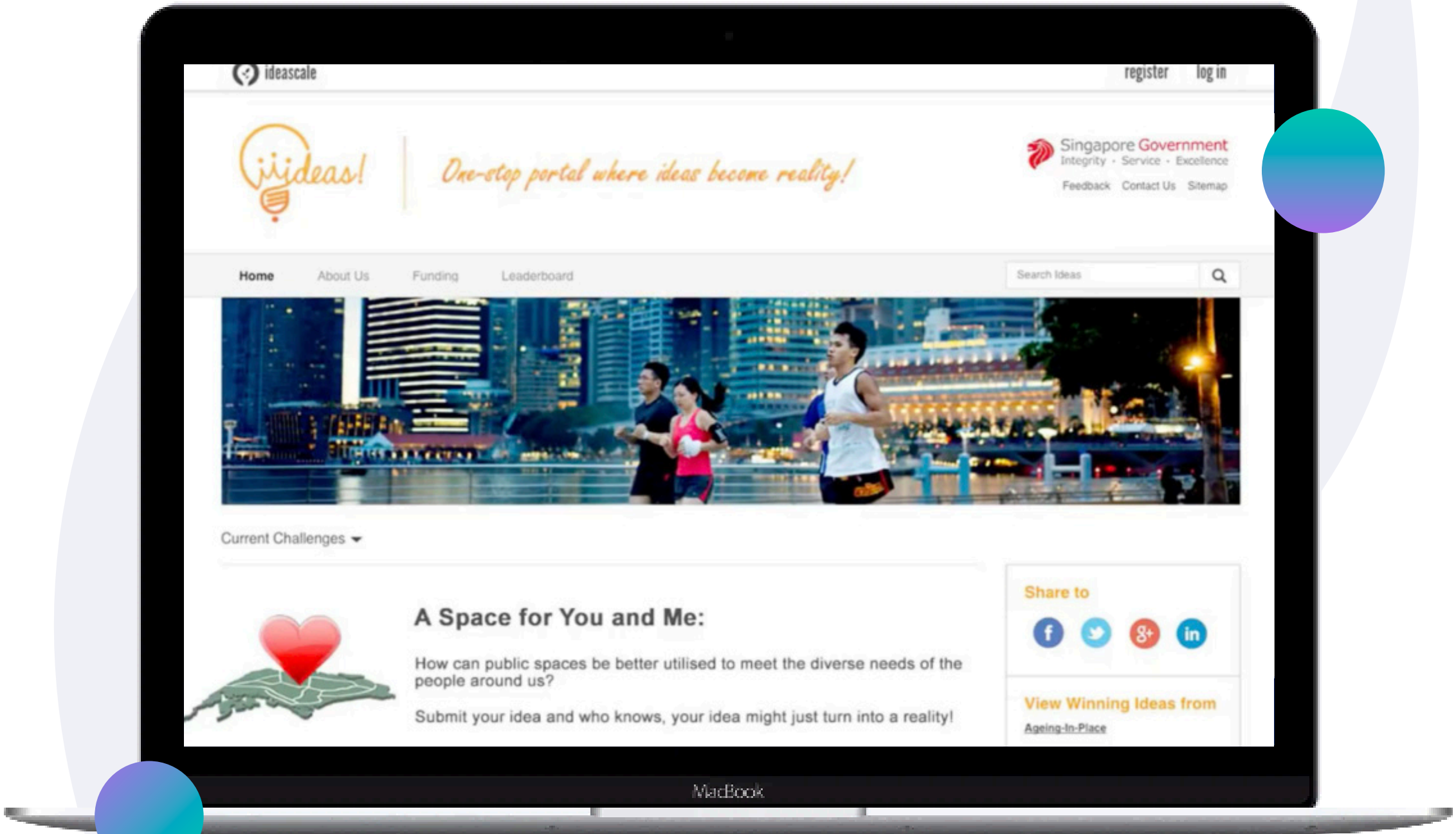
**Govtech
in Ukraine**
during the war

Govtech in Ukraine during the war

In 2019, the **Ministry of Digital Transformation of Ukraine** was created as the first step towards the Ukrainian government's transformation. The main goal was to create the world's most convenient public sector for citizens and businesses. That is why the Ministry launched the ecosystem Diia. Diia means Action in English, and the name totally reflects the idea of the brand. Diia ecosystem consists of Diia mobile app, Diia web portal, Diia. Digital Education, Diia.Business and Diia.City. In 2021, Ukraine became the first country in the world to adopt a law giving digital documents the same legal force as paper ones.

After the full-scale invasion of Russia on February 24, 2022, state registers were disabled for security reasons. Because of this, Diia no longer displays some documents. Still, the Ministry of Digital Transformation team promptly developed services and documents necessary during martial law.
The main features of the Platform of Registries:

- all data is stored in secure registries making the Ukrainian digital services ecosystem cyber-secure;
- a team of three people can create and maintain new registries using the Platform;
- the registries are developed by the in-house team; no third-party developers are required; and
- the platform software is open-source and does not require licenses.

Govtech in Ukraine during the war

Diia ecosystem components

Diia mobile application

The Diia app is a core ecosystem solution that more than 21 million Ukrainians use. This application allows Ukrainians to access 14 digital documents and 23 popular public services on their smartphones. Ukraine is the first country in the world where a digital ID is equivalent to a physical one.
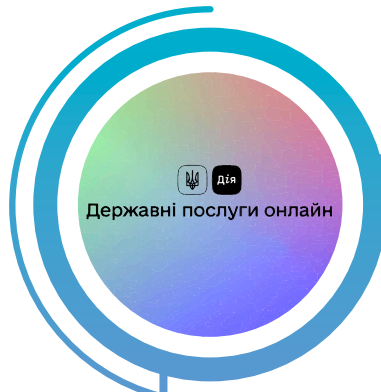
Diia public services portal

Diia web portal digitises more than 70 public services, including business registration, which is the fastest in the world. This portal allows Ukrainians to incorporate their business in Ukraine online within 10 minutes.
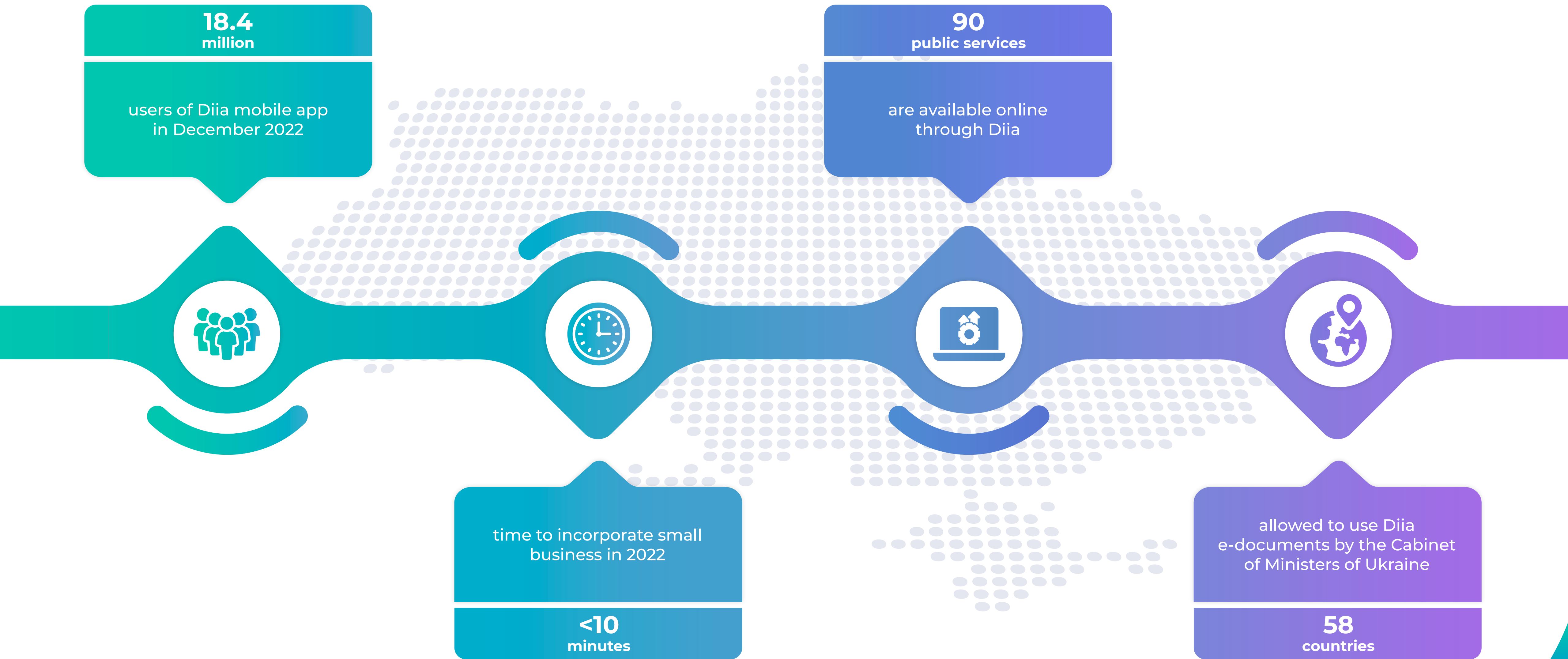
Diia.City

In 2022, Ukraine introduced a special legal framework for the tech industry. Over 360 companies became residents of Diia.City since February 2022, benefiting from its tax incentives and convenient legal mechanisms.

Diia.Business

Diia.Business portal is the one-stop shop for entrepreneurs, where they can find essential information on how to set up and promote a business. The portal provides access to 80 services for entrepreneurs, such as free consultations on 70 various topics, the financial products marketplace, an export section, and others. Through the portal, entrepreneurs can also access 12 offline hubs to receive free consultations, attend educational events, rent space, and test their products.

Diia. Digital Education

Diia. Digital Education is the national online education platform for digital literacy. Since its launch in 2021, around 1.5 million Ukrainians have studied using this service. On the platform, 90 free 'edutainment' shows cover topics ranging from rudimentary digital skills to cybersecurity and cryptocurrency for various groups of citizens (from schoolchildren to civil servants and entrepreneurs). 'Edutainment' combines educational methods of entertainment, active learning, motivation, and interaction.

Govtech in Ukraine during the war

Key metrics of Diia during the war

18.4 million

users of Diia mobile app in December 2022

90 public services

are available online through Diia

time to incorporate small business in 2022

<10 minutes

allowed to use Diia e-documents by the Cabinet of Ministers of Ukraine

58 countries

Govtech in Ukraine during the war

Integration of Diia with other governments' digital systems
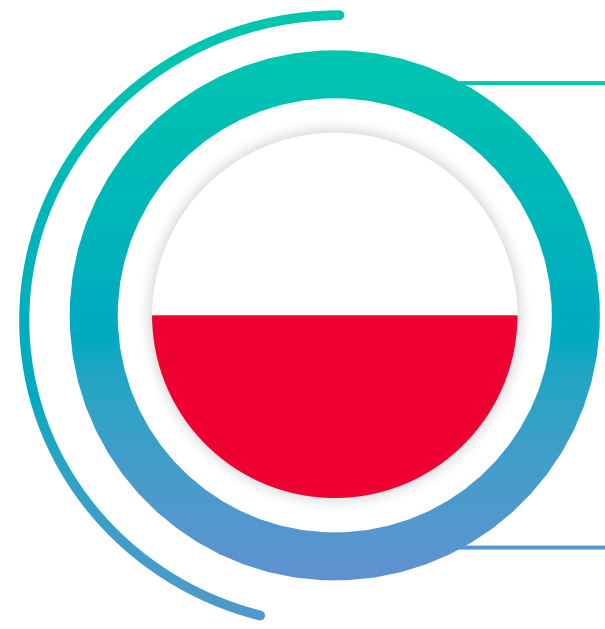
Poland has developed an electronic document Diia.pl for Ukrainians, available through mObywatel, a Polish mobile application for digital document management. Diia.pl confirms the lawful residence of Ukrainian citizens who arrived in Poland fleeing the war, allowing them to travel within the European Union and cross its external borders. Deeper integration with the Polish system is planned to enable the processing of all Ukrainian digital documents.
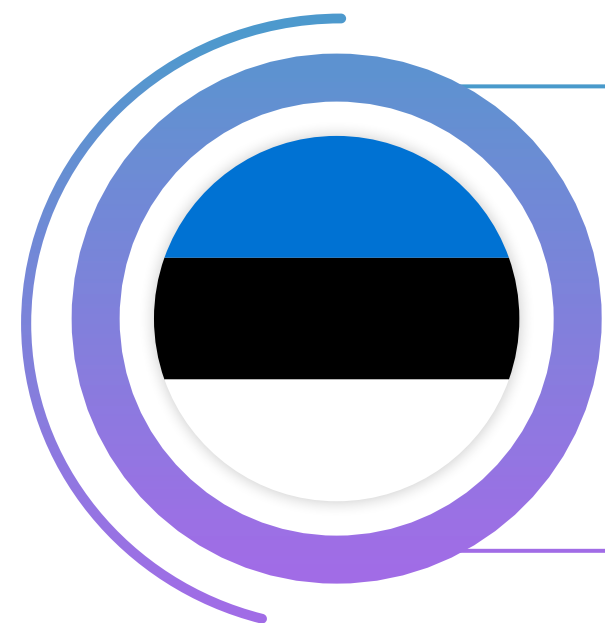
Estonia expressed interest in Ukraine's experience and wants to introduce a similar application based on Diia. The Ukrainian Ministry of Digital Transformation advises Estonian colleagues on implementing user-friendly public services. Ukraine and Estonia have a very similar digital government architecture. Therefore, Estonia can quickly implement most Ukrainian solutions and services. At the World Economic Forum in Davos in 2023, Estonia presented the mRiik app, an equivalent of Ukraine's Diia. Starting in February, the application will be available to testers, and the full launch of 'Estonian Diia' is planned for mid-2023.

Govtech in Ukraine during the war

**More than 20 services were launched during the war**

eVorog (eEnemy)

A chatbot that allows Ukrainians to report the movement of invading forces or their vehicles, thus assisting the Ukrainian army.

Ukrainians can send photos and videos of the enemy's movements, confirming its geolocation. After verification, the data is sent to the Armed Forces.

As of August 6, more than 344 thousand Ukrainians have used eVorog.
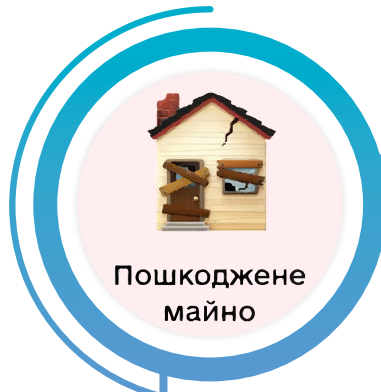
Report damaged property

Every Ukrainian whose home was destroyed by the war can send a message through Diia and report the damage.

Later, a special commission will be established to assess the losses. The procedure for loss compensation is also to be developed.

Filling out the application takes 5 minutes, and the government considers the report on its submission date.

eDocument

A temporary digital document valid during martial law, which contains basic information about the person: identification details and taxpayer number.

Many citizens lost their documents during the war, while state registers were disabled for data protection. Therefore, a passport could disappear from Diia, but an automatically generated alternative document appeared.

Access to national TV and radio

The Russian army is actively blocking access to information from the Ukrainian side in the occupied territories.

To provide Ukrainians with access to Ukrainian news, Diia broadcasts Ukrainian TV channels and Ukrainian radio.

Certificate of an Internally Displaced Person

A person who has left the temporarily occupied territory or the territory with ongoing hostilities must obtain a certificate of an internally displaced person. After receiving the status of an internally displaced person, the citizen automatically applies for financial assistance from the government.

Constraints
and trends
of the market

Market constraints

Only two available growth strategies

Government-related technology is usually limited to one solution customer per country because servicing government agencies is a one-to-one relationship. Companies must choose a growth strategy by expanding to other countries or targeting different levels and areas of government within one country.

Peculiarities of public sector relations

Private companies, especially in software development, are used to the culture of prompt and efficient interaction with the client. To perform even relatively simple tasks, government tech companies must interact with multiple departments and agencies, experience delays in response time, and deal with cumbersome paperwork.

Legal diversity

It is critical for a company planning to supply its solutions to various countries to research their national and regional legal peculiarities. The marketability of Govtech solutions may be limited by regulatory compliance challenges across borders, even in the seemingly unified EU market.

Dominance of big companies

It is challenging for newly established Govtech players to compete with existing providers that are already well-established in the market. That is why often start-up companies are quickly taken over without becoming full-fledged competitors. Thus, major players expand their portfolios and integrate the most appealing solutions by acquiring potential competitors.

Existing outdated solutions

New companies are often limited in creating their solutions because the government already has legacy systems in place. Such outdated systems impede innovation and require not only increased expenditures but also the search for specific legacy competencies to ensure the backward compatibility of upcoming solutions. Also, the government often chooses long-term cooperation with one trusted partner instead of seeking innovative solution providers that would require rebuilding the existing system.

Market trends

Modernization of the public IT infrastructure

To improve their performance, governments are rapidly migrating their outdated infrastructure systems to the cloud, as this technology is much cheaper and more secure in terms of data protection. Also, governments often require coordination between agencies and the private sector, thus actively implementing technologies for real-time data exchange within a single ecosystem.

Digital currencies

As cryptocurrencies and non-fungible tokens (NFTs) gain popularity, governments are challenged to legalize them. These technologies are supposed to improve operational efficiency, fight corruption, ensure supply chain transparency, and much more. Digital currencies will also most likely be issued by governments so that they can regulate their circulation as issuers.

Digital identification of citizens

Digital identification extends beyond online authentication and provides users with access to public services. Several countries already have a simple identification process and have implemented digital ID cards, which sometimes include biometric verification. Governments are exploring the possibility of using blockchain technology to create identification databases. The UK and Belgium have launched pilot projects on decentralized identification built on Microsoft platforms.
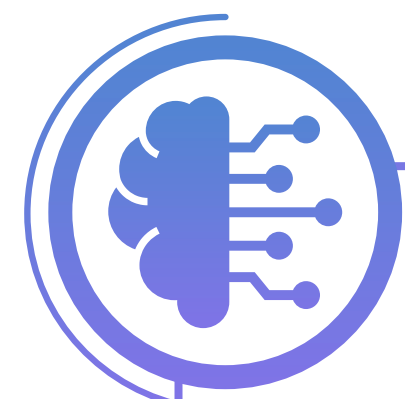
Artificial intelligence in interaction with the citizens

Improving public services by moving them online reduces bureaucracy and increases the speed of delivery. Chat-bots are AI-based applications that governments will increasingly use to automate public services. In addition, natural language processing (NLP) technology will be actively used to optimize services that receive high daily call volumes.
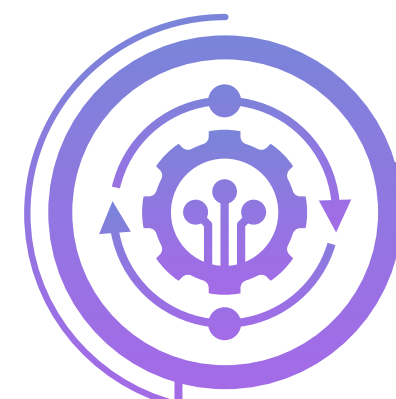
Hyper-automation

The modern world is moving away from primitive and standardized activities and towards reallocating human resources to creative or managerial activities. Any government is a bureaucratized system that needs hyper-automation, i. e. the implementation of cross-cutting initiatives that streamline the entire system rather than individual processes or areas. According to Gartner, over the next three years, 75% of governments will have at least three initiatives to implement hyper-automation.
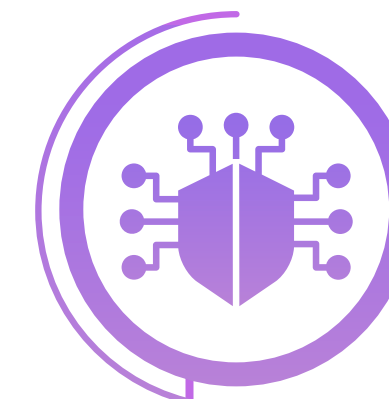
Cybersecurity

As the number of cyberattacks increases worldwide, society is concerned about the protection of data stored and used by the government. Maintaining the safety and trust of citizens establishes cybersecurity as a priority for the government. Government agencies increasingly use artificial intelligence capabilities to automate attack detection and response and consider outsourcing some functions.

Key events
in the Govtech
sector

Key events in the Govtech sector

SMART CITY EXPO WORLD CONGRESS	**WORLD GOVERNMENT SUMMIT**	**GITEX** GLOBAL	**Public Sector Show**	**TechConnect**
November 14-16, 2023	February 13-17, 2023	October 8-12, 2023	June 6-7, 2023	2023
Barcelona, Spain	Dubai, UAE	Dubai, UAE	London, UK	USA
SCEWC is the leading smart city event. It's a hotspot for cities, institutions and enterprises to share knowledge and get inspired, as well as the best marketplace to network and do business.	The Summit will bring thought leaders, global experts and decision makers from around the globe to share and contribute to the development of tools, policies, and models that are essential in shaping future governments.	The world's largest, most inclusive tech & startup event unveils new worlds of promise — from the transcendent power of 6G to the vast virtual business ecosystems of the Metaverse — among many tech-powered revolutions and future-forward thinking.	The Public Sector Show will connect suppliers of leading solutions to budget-holders and influencers across the public sector, who are looking to solve the biggest challenges facing the sector, including digital transformation, data, supply chain efficiency and shared services.	The TechConnect World Innovation Conference and Expo has connected top applied research and early-stage innovations from universities, labs, and startups with industry end-users and prospectors.

NASCIO	**NGA** NATIONAL GOVERNORS ASSOCIATION	**Tokyo Tech**	tmforum **DIGITAL TRANSFORMATION WORLD**	**PUBLIC SECTOR NETWORK**
2023	2023	2023	May 31 — June 2, 2023	2023
USA	USA	Tokyo, Japan	Nice, France	Melbourne, Australia
NASCIO conferences are educational and networking based; they do not include an exhibit hall, trade show or demo times so that attendees may focus on discussing issues facing the field of information technology in state government.	NGA is the voice of the nation's governors and one of the most respected public policy organizations in the country. The association's members are the governors of the 55 states, territories and commonwealths. Members come to the association from across the political spectrum, but NGA itself is bipartisan.	Tokyo Tech aims to become one of the world's top 10 research universities by 2030. In pursuit of this goal, the Institute continues to cultivate global leaders in the field of science and technology as it promotes advancements in innovation.	The TM Forum provides an open, agile and collaborative environment that enables communications service providers and digital service providers to rapidly transform their business processes, IT systems and ecosystems to take advantage of the opportunities of the ever-evolving digital world.	A social learning platform that exists to help government around the globe break down silos, collaborate, and work together for better outcomes for citizens.

Credits

Credits

KRESTON UKRAINE

📅	**20 years**	Experience in accounting and consulting services
👥	**150+**	Professional staff
👍	**200+**	Loyal clients
💼	**2000+**	Portfolio of successful projects

🌐 kreston.ua

👤 **Sergey Atamas**
Managing partner

atamas@kreston.ua

f kreston.ukraine

Kreston Ukraine is one of the largest accountancy and consulting companies in the country. We represent Kreston Global, the network of 23,500 people in 160 independent accounting firms across more than 110 nations.

Our commitment to the investment market of Ukraine:

1. To support foreign private capital in the recovery and growth programs of Ukraine.
   Kreston Ukraine wants to be a reliable partner as a one-stop support partner for international strategic and financial investors.
   Our range of investor support services includes:
   · Pre-investment analysis (feasibility study);
   · Government relations;
   · Transaction support (legal, financial, operational, HR);
   · Business valuation;
   · Executive search;
   · Occupational fraud risk management;
   · Strategic and operational support.

2. To support venture capitalists and startups in Ukraine
   The Ukrainian technology and startup ecosystem contains a vast potential for successful investments. We can ensure the right acquisition strategy and efficient approach as your buy- or sell-side advisor.
   Our venture-related services include:
   · Venture due diligence;
   · Targets scouting and screening;
   · Business planning and financial modeling;
   · Transaction structuring and legal support;
   · Technical and industry consultancy.

Credits

Міністерство цифрової трансформації України

The Ministry of Digital Transformation of Ukraine: Goals 2024

100% of public services are available online to citizens and businesses

95% of transport infrastructure, settlements and social facilities have access to high-speed Internet

6 mln Ukrainians developed their digital skills

10% share of IT in the country's GDP

The Ministry of Digital Transformation is a government ministry in Ukraine responsible for developing and implementing national policy for digitalisation, open data, national electronic information resources, interoperability,

the introduction of electronic services, and the development of digital literacy of citizens. It was introduced in September 2019.

thedigital.gov.ua

mintsyfra

Valeriya Ionan,
Deputy Minister for Eurointegration at the Ministry of Digital Transformation of Ukraine

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МІНІСТЕРСТВО ЕКОНОМІКИ УКРАЇНИ

The Ministry of Economy of Ukraine: Strategic objectives

Recovery restore safe environment for the comfortable life of people and doing business in Ukraine within 12 months after the end of the war

Growth ensure Ukraine's GDP growth from USD 200 billion in 2021 to USD 500 billion in 2032 and further ability of the economy to generate a high rate of economic growth

Europe achieve full compliance with the economic criteria of the EU membership

The Ministry of Economy of Ukraine is the principal authority responsible for developing and implementing national policies related to economic and social development, consumer prices regulation, industry, investment, trade, entrepreneurship, and foreign economic issues, including coordination of economic and social cooperation with the European Union.

me.gov.ua

mineconomdev

Oleksii Sobolev,
CFA. Deputy Minister of Economy of Ukraine

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Credits

ОФІС РЕФОРМ
КАБІНЕТУ МІНІСТРІВ УКРАЇНИ

The Reforms Delivery Office: Key facts

2016 — Establishment of the Reforms Delivery Office (RDO) as an advisory body to Ukraine's Cabinet of Ministers, coordinated by the Prime Minister of Ukraine

6+ reforms and projects — Focusing on Ukraine's recovery, integration into the EU and the OECD

23 — Highly professional Ukrainian experts

The Reforms Delivery Office (RDO) is an advisory body to Ukraine's Cabinet of Ministers, coordinated by the Prime Minister of Ukraine.
RDO is the part of Ukraine Reform Architecture Project (URA), supported by EBRD and the EBRD's Ukraine Stabilization and Sustainable Growth Multi-Donor Account (Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Poland, Sweden, Switzerland, the United Kingdom, the United States and the European Union, the largest donor).

rdo.in.ua

ReformsDeliveryOfficeCMU

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I·S·E
Corporate Accelerator

The Ministry of Economy of Ukraine: Strategic objectives

5+ years — Experience in the venture capital market

4 — Programs for startups and corporate innovations

34 — Startups in portfolio

50+ — Partnerships between startups and corporations

A leading Ukrainian startup accelerator and VC firm bringing startups to the next level. Our focus is a startup-corporation partnership and preparing startups for the subsequent funding round. We focus on Seed, Early stage, Growth investment stages. ISE runs several programs for startups and corporations: "Start-up Accelerator," "Corporate Innovation," "Venture Capital Deals," and "Digital Innovation Hub."

ise-group.org

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