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Global GovTech Industry Overview Q2 2022

Teaser

August 2022

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Global GovTech Industry Overview Q2 2022

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Introduction

Created by Deep Knowledge Analytics **"Global GovTech Industry Overview Q2 2022" report provides a thorough overview of the GovTech sector, including quantitative and qualitative indicators** such as the distribution of GovTech companies by countries, the top 100 GovTech companies in terms of funding, and the top startup hubs and accelerators. It also includes key findings and information about the industry's overall landscape.

The government IT sector is globally expanding as nations rush to modernise their administrations. **Approximately 930 GovTech businesses and 1,430 investors are profiled in this research based on their global commercial activity and potential for innovation.** The UK and Australia have the most government technology companies in their respective regions, although the US continues to be the leader in this field. In accordance with their digital transformation plans, a number of nations have advanced their GovTech agendas.

The report highlights business-government partnerships as well as governmental initiatives in this field and experience of creating services during the COVID-19 pandemic.

Sources: Deep Knowledge Analytics

Methodology and Approach

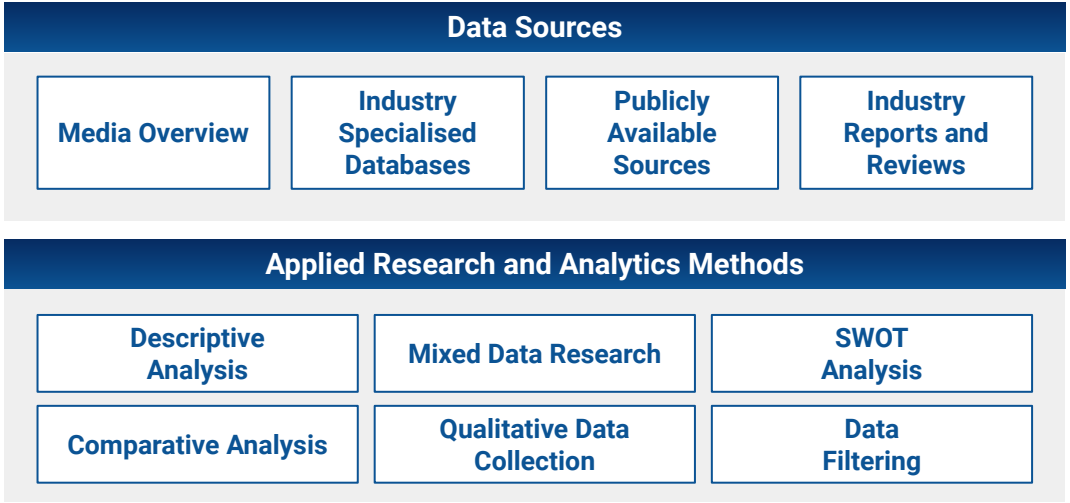
Methodology

The case study aims to thoroughly understand the global GovTech market. This analysis looks at GovTech businesses, investors, community organisations, R&D facilities, universities, accelerators, and hubs. In ten distinct industry categories — Cybersecurity, Decision-Making Platforms, Digital Participation & Services, E-Government Solutions, Elderly and Healthcare, Monitoring Systems, Public Safety, Smart City & Transportation, Energy-Saving, Utilities & Waste Management, Education & Science — the report examines **930 companies, 1,430 investors, and 50 hubs**.

The report provides a thorough overview of the GovTech industry, making use of a variety of research strategies and analytical tools. Although there are many different opinions on what constitutes government technology, our definition is based on industry research, ecosystem feedback, and professional counsel.

Approach

Based on various research methods and analytic techniques, the analytical report provides a comprehensive overview of the global GovTech market. The approach has certain limitations, especially when using publicly available data sources and conducting secondary research. Deep Knowledge Analytics is not responsible for the quality of the secondary data presented herein; however, we do our best to eliminate risks by using different analytic techniques to cross-check data.



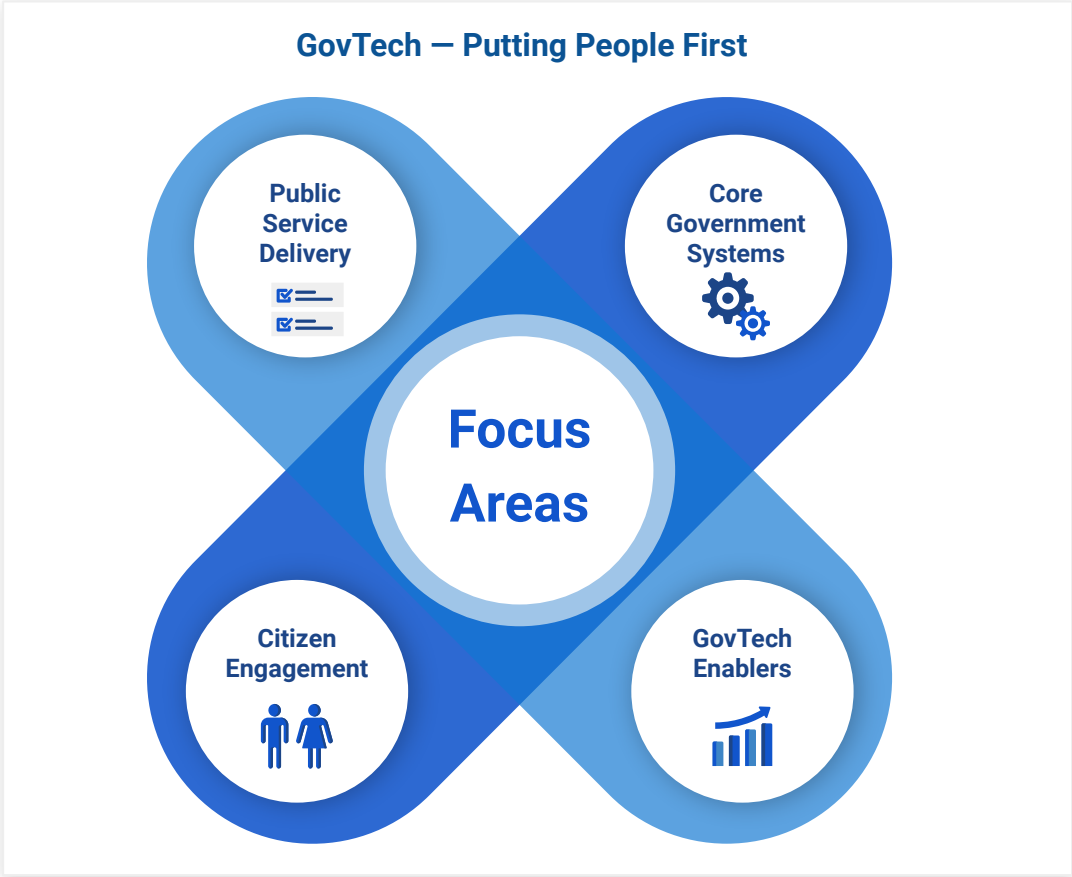
Sources: Deep Knowledge Analytics

Executive Summary

The process of formulating public policy plays a central role in the life of the population. The **government's primary goal is for legislators to set guidelines and then government officials to enforce those policies**. They affect the life of every citizen, from how and when to vote, to where everyone can park, and what is a crime and what is not.

GovTech companies participate in the policy implementation and evaluation phases and help governments implement their chosen public policy option. **GovTech companies are the link between the government and the immediate population of a particular country**. Such companies are the executive body when governments pass laws (in our case, concerning longevity).

Stakeholders inside and outside the government monitor the impact of a policy and determine whether it achieves its intended goal. This can lead to further changes in public policy, taking into account the influence of the original policy.

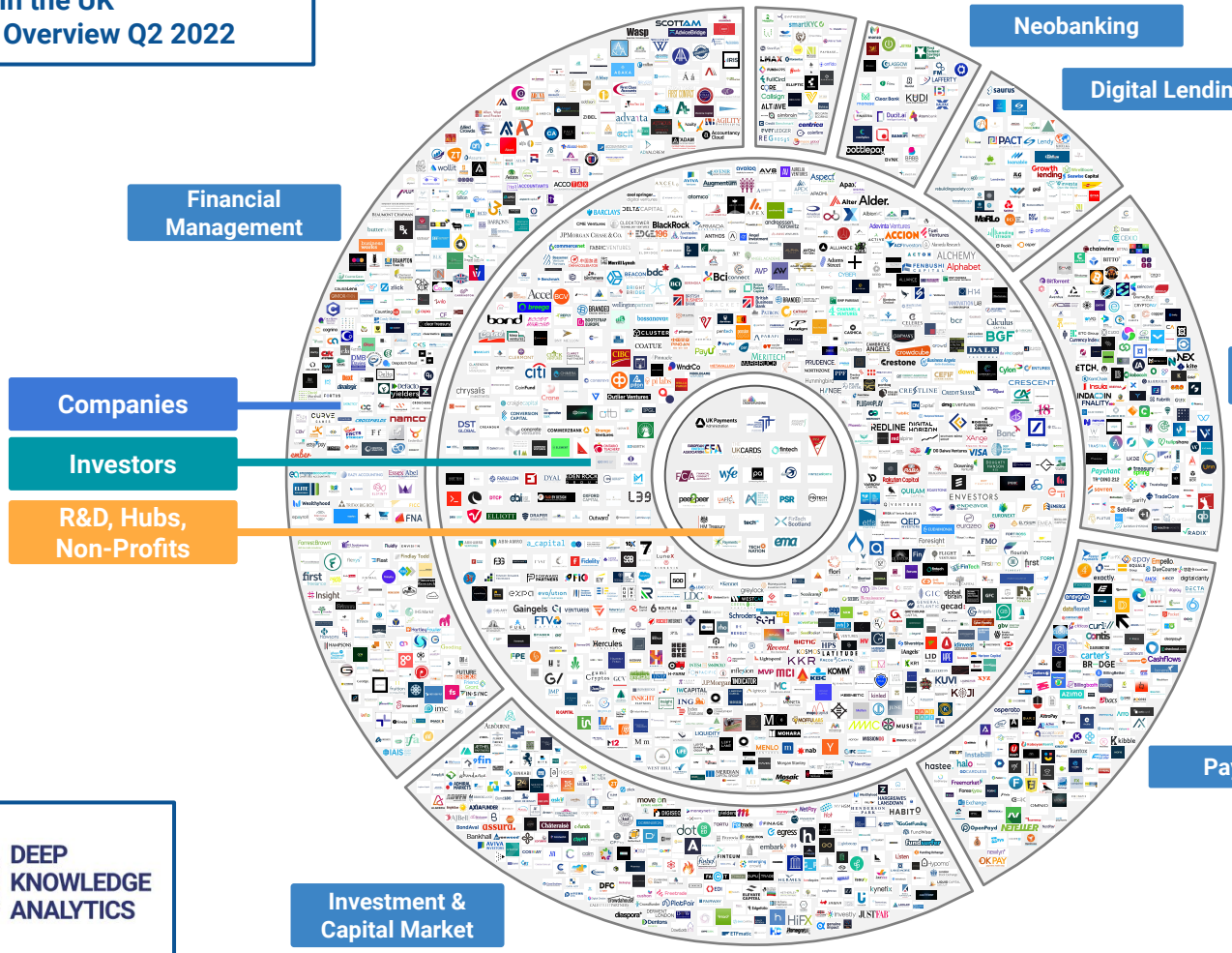


Sources: Media Overview, Deep Knowledge Analytics

FinTech in the UK
Industry Overview Q2 2022

Update

R&D, Hubs,
Non-Profits - 25+



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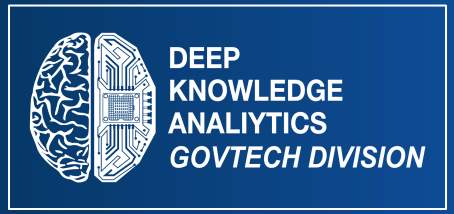
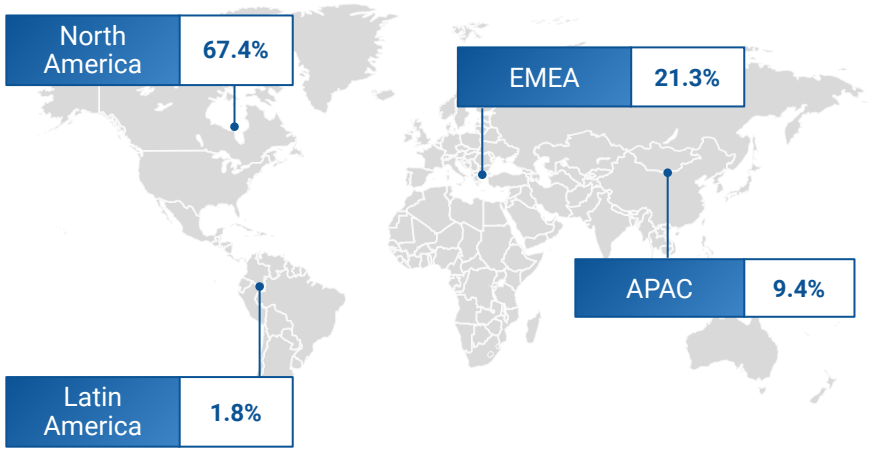
Global GovTech Industry Overview

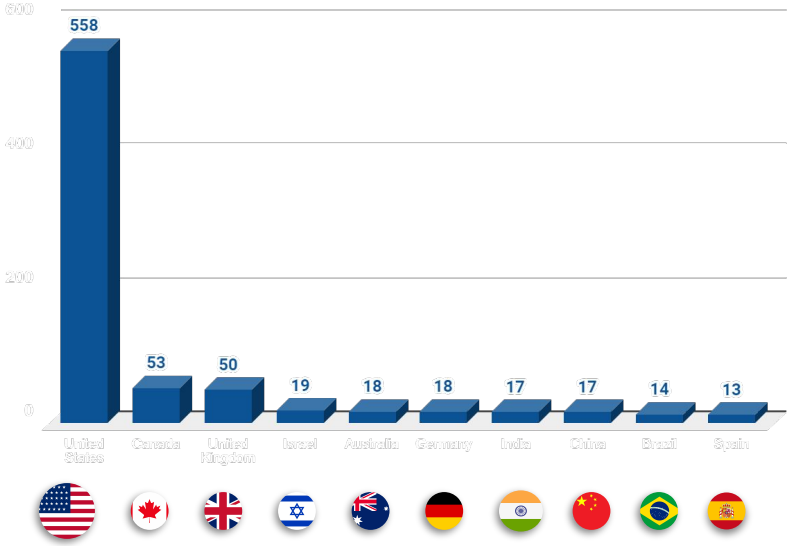


Regional Distribution of GovTech Companies

GovTech Companies by Regions, Q2 2022



Top 10 Countries by the Number of GovTech Companies, Q2 2022

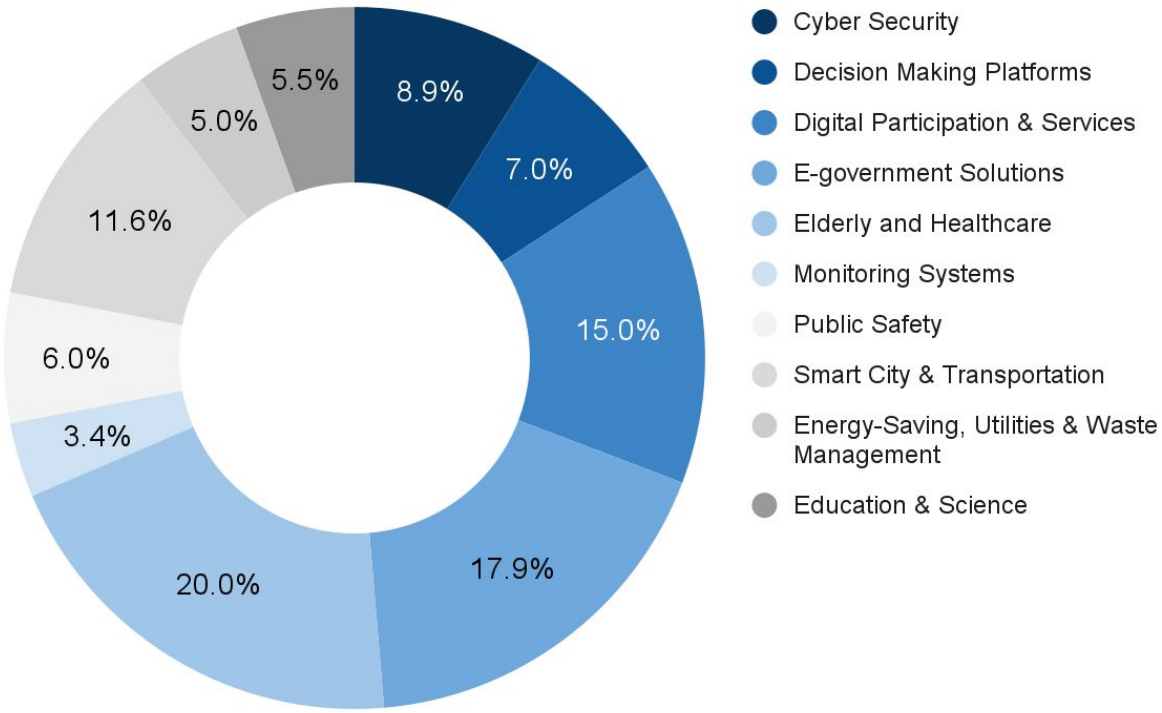


More than 67% of GovTech companies are located in North America. The second biggest region by companies' location is EMEA with a more than 21.2% share. The Top-3 countries by the number of analysed companies are the United States (558), Canada (53), and the United Kingdom (50).

Sources: Deep Knowledge Analytics

GovTech Companies by Subsectors

Share of GovTech Companies by Subsectors, Q2 2022



Elderly and Healthcare is the largest category comprising 20.0% of all analysed companies.

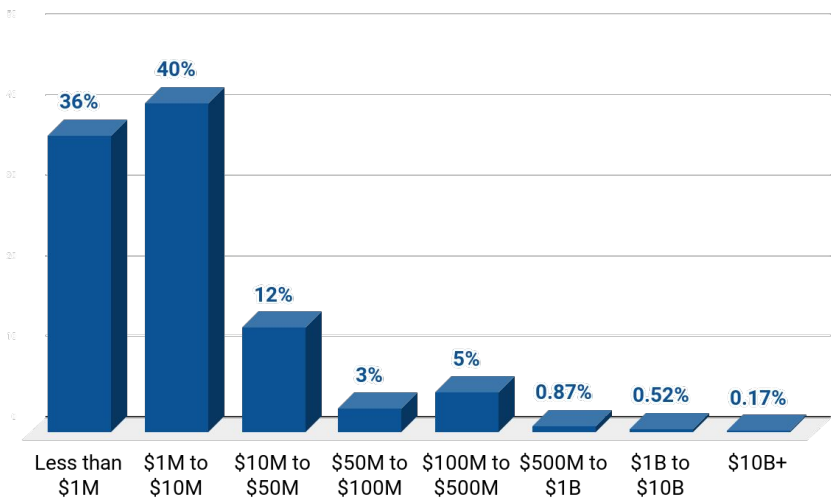
The second and the third biggest types are E-Government solutions and Digital Participation & Services with 17.9% and 15% respectively.

Comparing to Q1 2022, Education & Science category grew from 3.5 % to 5.5%, and Cyber Security from 5.4% to 8.9%

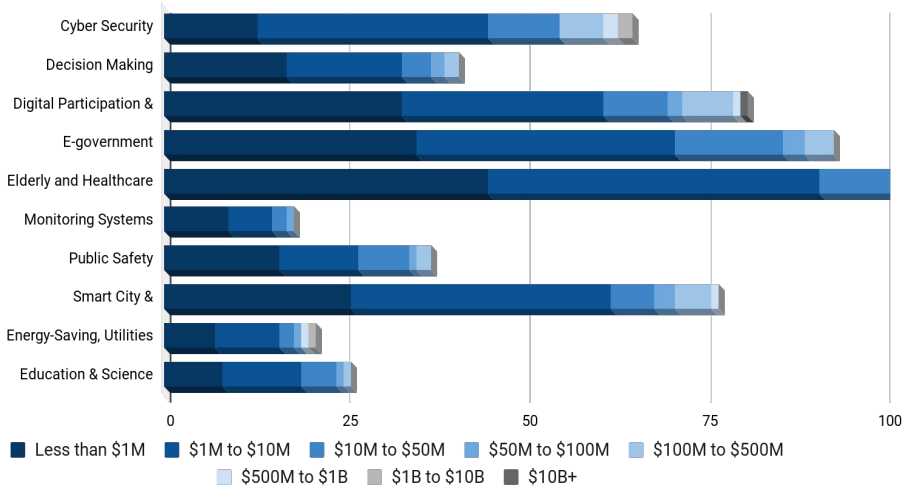
Sources: Deep Knowledge Analytics

Revenue Breakdown by Subsectors

Breakdown of GovTech Companies by Estimated Revenue, Q2 2022



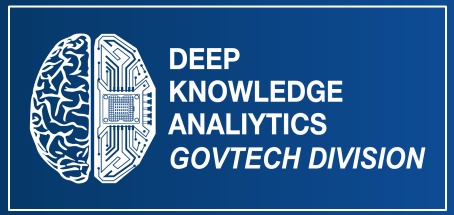
GovTech Subsectors by Estimated Revenue, Q2 2022



Early-stage startups, middle-market firms, and publicly traded firms all make up the GovTech industry, which is a varied and expanding industry. Nevertheless, less than $10 million in income is earned by each of the 76% of GovTech businesses every year.

Sources: Media Overview, Deep Knowledge Analytics

GovTech Top Entities



Leading GovTech Companies in Terms of Investments*

1	SenseTime	2.64
2	Devoted Health	1.97
3	Booz Allen Hamilton	1.71
4	Welltower Inc	1.25
5	Blackberry	1
6	Miaoshou Doctor	0.95
7	Enerkem	0.87
8	Nextdoor	0.72
9	Fractal Analytics	0.69
10	Pioneer Corporation	0.54
11	One Medical	0.53
12	CarDekho	0.5
13	Biocartis	0.42
14	Signifyd	0.39
15	Verra Mobility	0.35
16	CivicPlus	0.29
17	Salt Security	0.27
18	FiscalNote	0.26
19	BigID	0.25
20	Axon	0.25

As of Q2 2022, in USD B

Sources: Media Overview, Deep Knowledge Analytics

Biggest GovTech Investors by Number of Exits

1	New Enterprise Associates	556
2	Intel Capital	473
3	Y Combinator	444
4	SV Angel	410
5	Techstars	372
6	Accel	354
7	Sequoia Capital	350
8	500 Startups	339
9	Goldman Sachs	321
10	Kleiner Perkins	318
11	Bessemer Venture Partners	284
12	Venrock	267
13	Index Ventures	227
14	GV	225
15	Lightspeed Venture Partners	207
16	Battery Ventures	197
17	Andreessen Horowitz	190
18	First Round Capital	189
19	EASME - EU Executive Agency for SMEs	186
20	Insight Partners	184

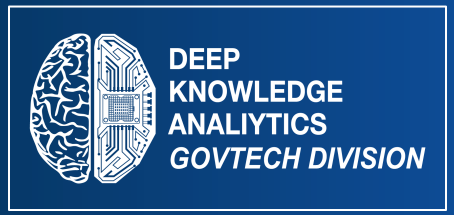
Sources: Media Overview, Deep Knowledge Analytics

Selected GovTech Hubs

1	Access Cities
2	Amsterdam Smart City
3	ASTRI
4	Bee Smart City
5	Beijing City Lab
6	Berlin Innovation Agency
7	Berlin TXL
8	Bpifrance
9	BrazilLAB
10	BRIC
11	Catapult Connected Places
12	CITIES
13	CITIXL
14	City of Boston
15	CivTech Scotland
16	CorLab
17	Creative HQ
18	e-Estonia
19	Euro Cities
20	GovTech Catalyst

Sources: Media Overview, Deep Knowledge Analytics

Technologies Shaping GovTech Industry

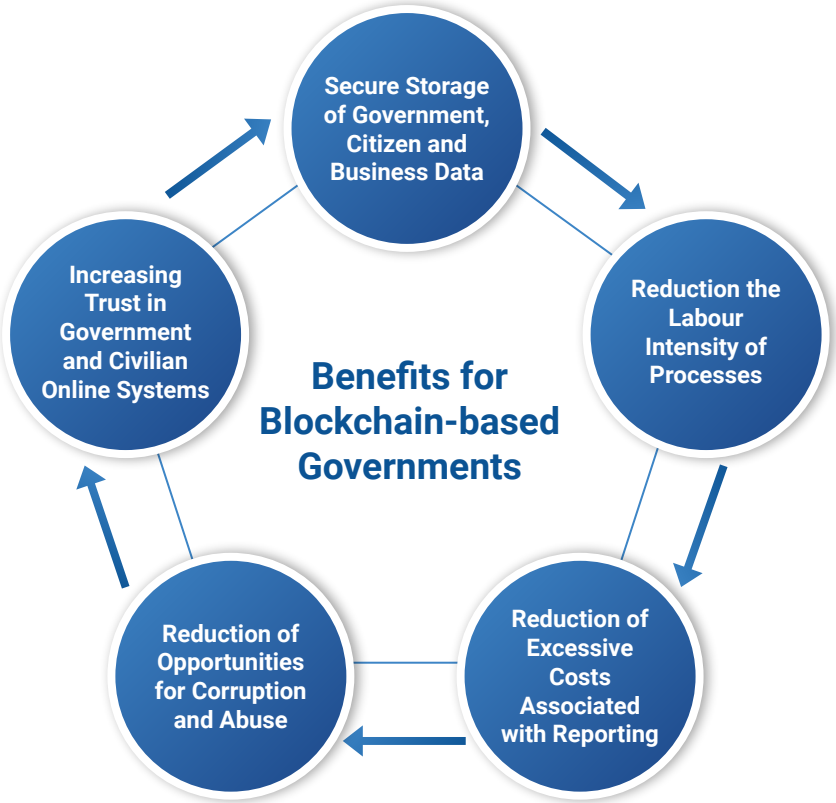


GovTech and Blockchain

Blockchain-based digital government can protect data, streamline processes, and reduce fraud, waste, and abuse while increasing trust and accountability. In a blockchain-based model of government, individuals, companies, and governments share resources through a cryptographically secure distributed ledger. This framework eliminates a single point of failure and protects sensitive citizen and government data.

Government Use Cases:

- Proof of Title and Transfers
- Self-enforcing Contracts
- Verification of Documents
- Patent Protection
- Administration of Welfare Benefits



Sources: Consensys, McKinsey

GovTech and Artificial Intelligence

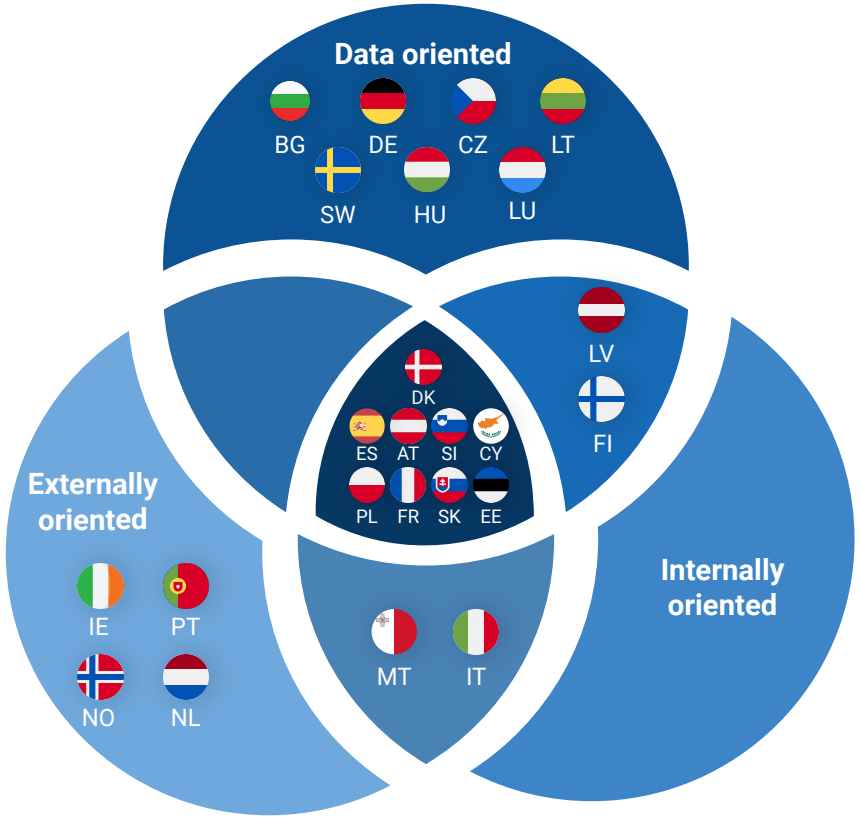
AI is improving the way the public sector serves its constituents.

One of the main approaches to driving the adoption of AI in government is **external orientation**. Countries that lean towards this approach can be seen as those that focus more on public-private collaboration to develop Artificial Intelligence (AI) in the public sector. These countries have recognised that public administration bodies do not have sufficient capacity and competence, and systems are too complex to work autonomously with AI.

The second approach, which can be highlighted in the strategies, is more **data oriented**. The group of countries that lean towards this approach are mostly looking to promote the availability and quality of data to drive AI. These strategies mostly describe initiatives to address the various data-related obstacles that prevent the development and deployment of AI in the public sector.

The third approach focuses primarily on improving internal capacity (**internally oriented**) as a key tool for driving the use of AI in governments. It is interesting to note that none of the countries analysed fall exclusively into this category, as no strategy has focused strongly on exclusively improving the internal capacity of public administrations as the best approach to facilitate AI adoption.

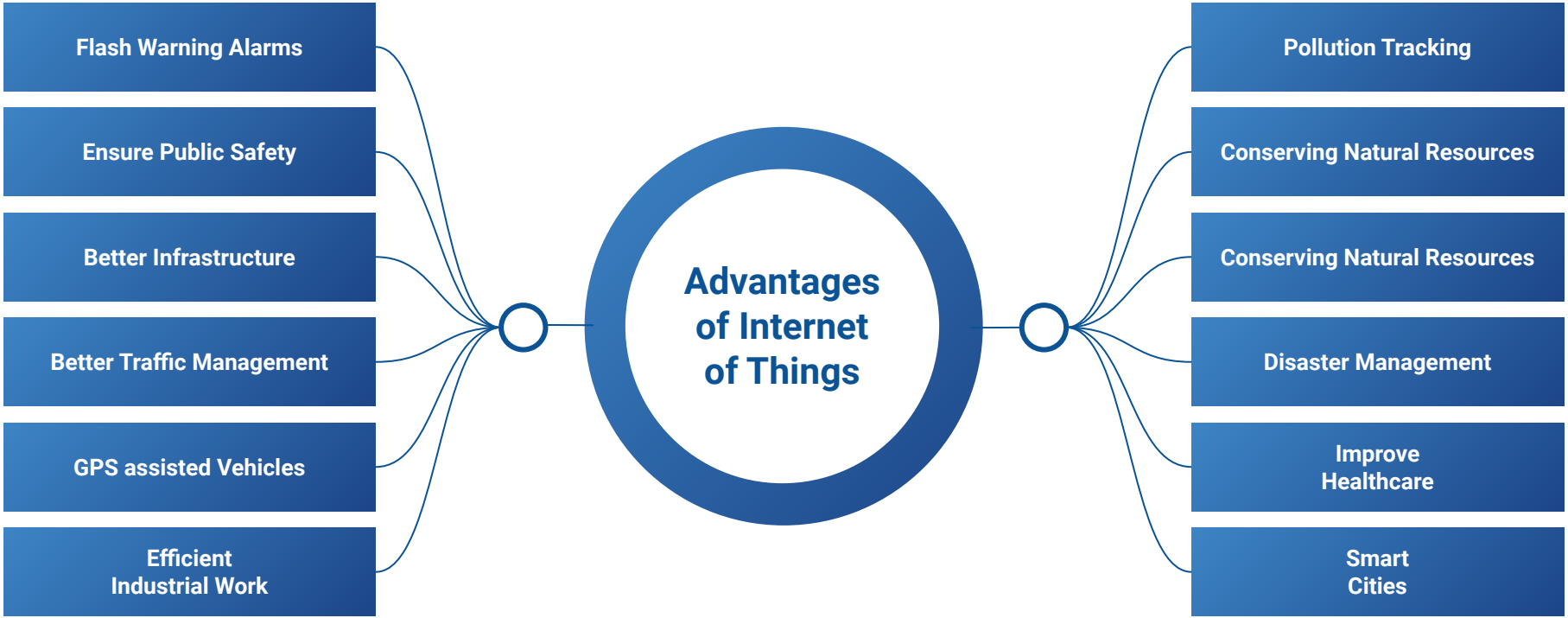
Clustering Exercise on the National Strategies



Sources: JRC Science for Policy Report

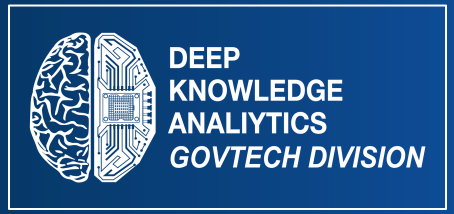
GovTech and Internet of Things

IoT gives the public sector the opportunity to transform services through data, analytics and automation. In simple terms, the Internet of Things refers to any object connected to the Internet that allows data to be sent and received seamlessly. Once networked, data can be easily mined and analysed – more than enough to revolutionise the way public services are delivered to citizens.



Sources: Analytics Steps

Case Studies of European GovTech Programmes



European GovTech Programmes: Austria and Poland

National governments are implementing a wide range of strategies, structures, and services when they create their own GovTech programmes in order to acquire cutting-edge technology and capitalise on the potential advantages of a thriving GovTech ecosystem. To demonstrate the range of options, we give an overview of the various setups and their actions in this chapter. While we concentrate on national GovTech programmes in this research, the conclusions may mostly be extended to other levels of government as well.

Austria

The establishment of Austria as a desirable and digital future business location requires the support of the economy with best practices related to the digital transformation, the creation of digitalisation-friendly regulatory framework circumstances, and the implementation of relevant financial assistance offers.

Austrian Digitalisation Priorities

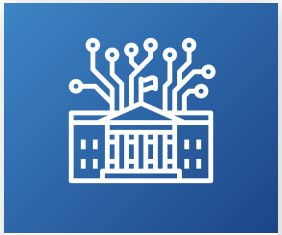
- Providing economic support through digital services (such as electronic sole proprietorship establishment)
- Cultivating an atmosphere that is digitalisation-friendly to encourage digital innovation
- Expansion of online services available to citizens (e.g., through oesterreich.gv.at)
- Establishing a task force for digitalization to coordinate the federal government's overall digitisation efforts

Poland

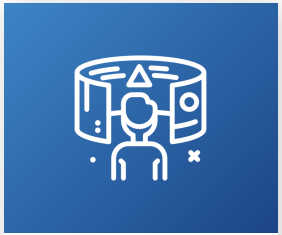
In chasing its goal is to "convert Poland from analog to digital" and to position the country as a global leader in the application of cutting-edge "disruptive" technology, particularly in administration and public services at all levels, from municipal to central government offices, Poland uses a tremendous amount of instruments.

Digital Poland Programme Priority Areas by 2023

Common access to high-speed Internet



E-government and open government



Digital competences of the society

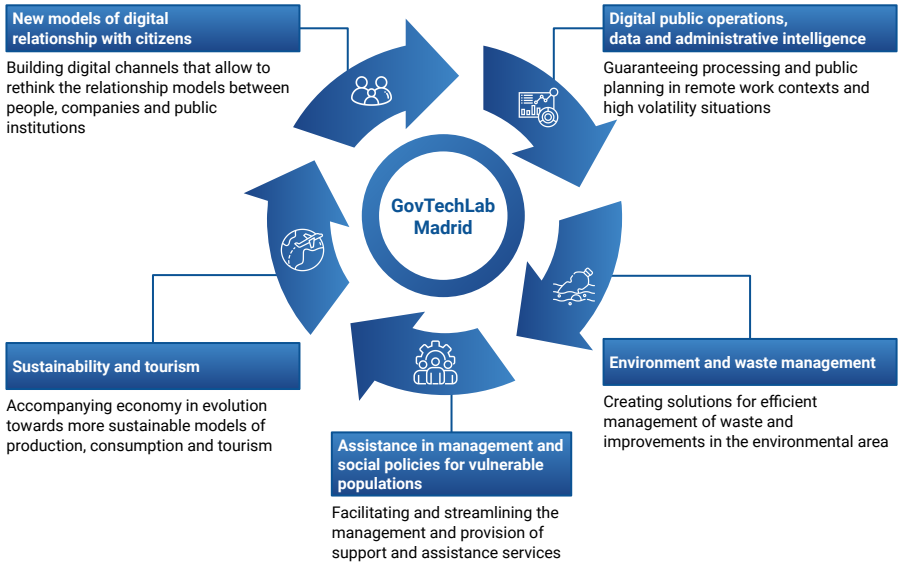
Sources: digitalpoland, Bundesministerium Arbeit und Wirtschaft

European GovTech Programmes: Spain and Switzerland

Spain

The number of Spanish public initiatives and the size of investments have increased rapidly over the past few years. This is happening due to the high number of digital MSMEs and GovTech startups operating in the country.

GovtechLab Madrid Has Programmes for Innovating 5 Key Government Spaces



Switzerland

One of the most developed economies in terms of public sector digital transformation is administered by the Swiss government. One of the main areas of attention is the increased usage of virtual interfaces for the delivery of public services.

Digital Switzerland Principles and Objectives

Putting people at the forefront
To shape digital society, they must be constantly included in the digital transformation processes

Providing room for development
Political entities and authorities encourage digital change to the extent that they are able to support it

Facilitating structural change
The digital transformation calls into question traditional patterns of social interaction and economic activity

Networking the shaping of transformation processes
To take advantage of the opportunities brought by structural change these must be tackled in a cross-sectoral way

Enabling equal participation for all and strengthening solidarity
The equitable distribution of opportunities and viewpoints reinforces social solidarity and coexistence

Guaranteeing security, trust and transparency
Services that are open and data-driven foster respect and trust in matters of personal growth and autonomy

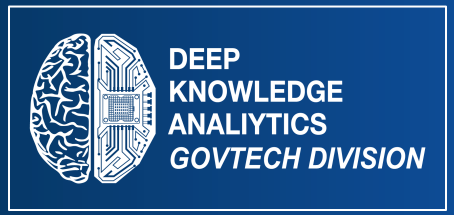
Strengthening digital empowerment
People should be able to participate competently in digitised political, social, cultural, and economic processes

Ensuring value creation, growth and prosperity
Barriers to trade and market access will be reduced so innovative businesses can thrive and competition is bolstered

Reducing the environmental footprint and energy consumption
To enhance climate and environmental protection, technologies must be applied intensively and strategically.

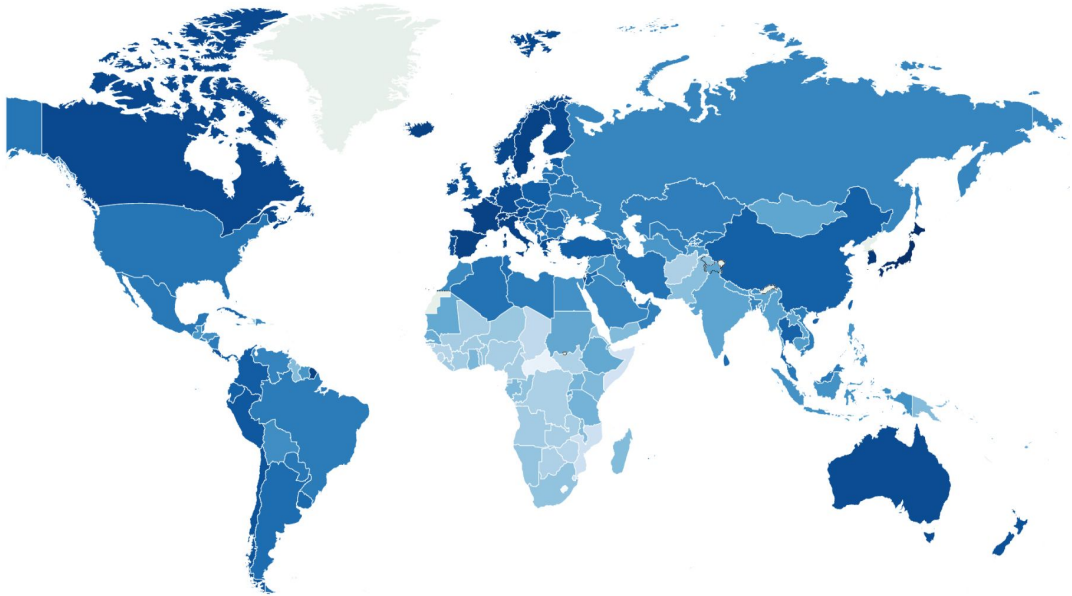
Sources: European Commission, Govtechlab Madrid

Longevity Governance



Longevity Governance

Geography distribution of HALE, 2019

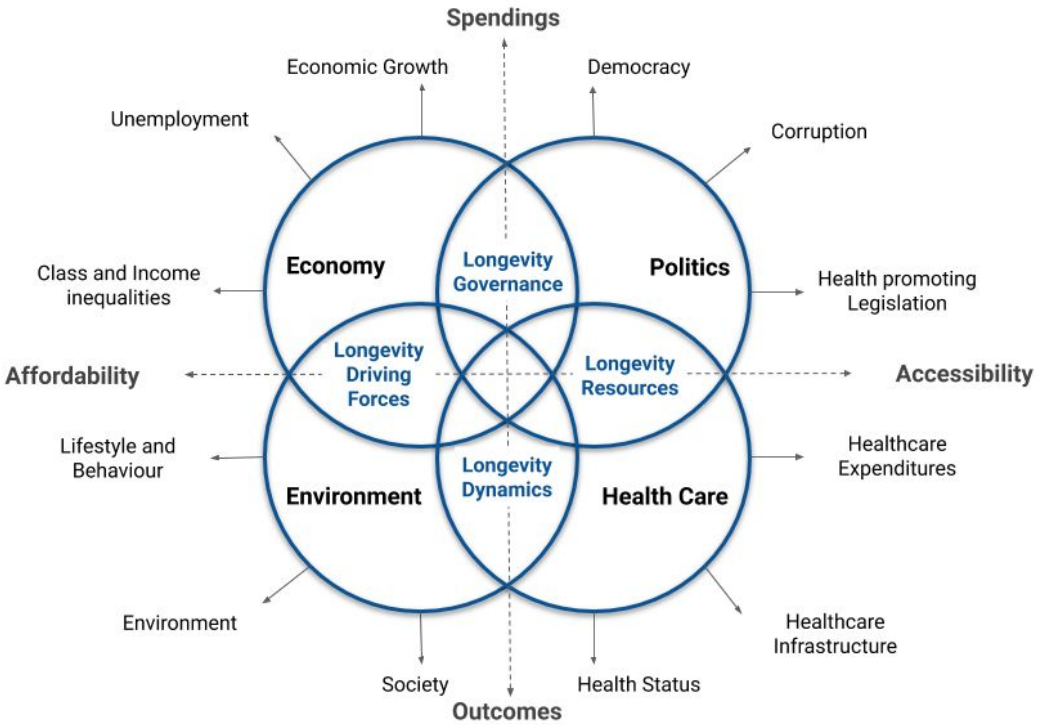


Today's increased global Longevity is a "problem of success", an inevitable consequence of sharp increases in sanitation, diet, health care, elderly care, and geriatric medicine, a set of changes which have occurred suddenly within the lifetimes of today's elderly.

Specifically, it means utilizing technology to ensure that these longer lives are also healthy, productive, financially active lives, and creating a system of government frameworks and financial incentives to create and sustain this case of affairs. There are metrics that most correlated with healthy longevity: **HALE, Life Expectancy, DALY rates, Healthcare Efficiency Index, Current Health Expenditure per Capita, Gross domestic expenditure on R&D.**

Sources: WHO

Healthy Longevity Progressiveness



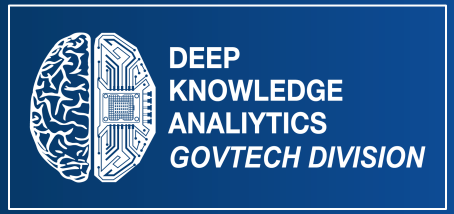
Longevity progressiveness is important for driving economic progress and competitiveness — both for developed and developing economies.

Healthy Longevity is affected by many groups of factors such as: socioeconomic status, demography, income, wellbeing, the quality of the health system and the ability of people to access it, health behaviours such as tobacco and excessive alcohol consumption, poor nutrition and lack of exercise, social factors, genetic factors and environmental factors including overcrowded housing, lack clean drinking water and adequate sanitation.

Longevity progressiveness should be based on four pillars. They are **good health outcomes, cost-efficiency, affordability of healthcare treatment for the population, and widest possible access to services and products.**

Sources: Aging Analytics Agency

GovTech Trends and Challenges

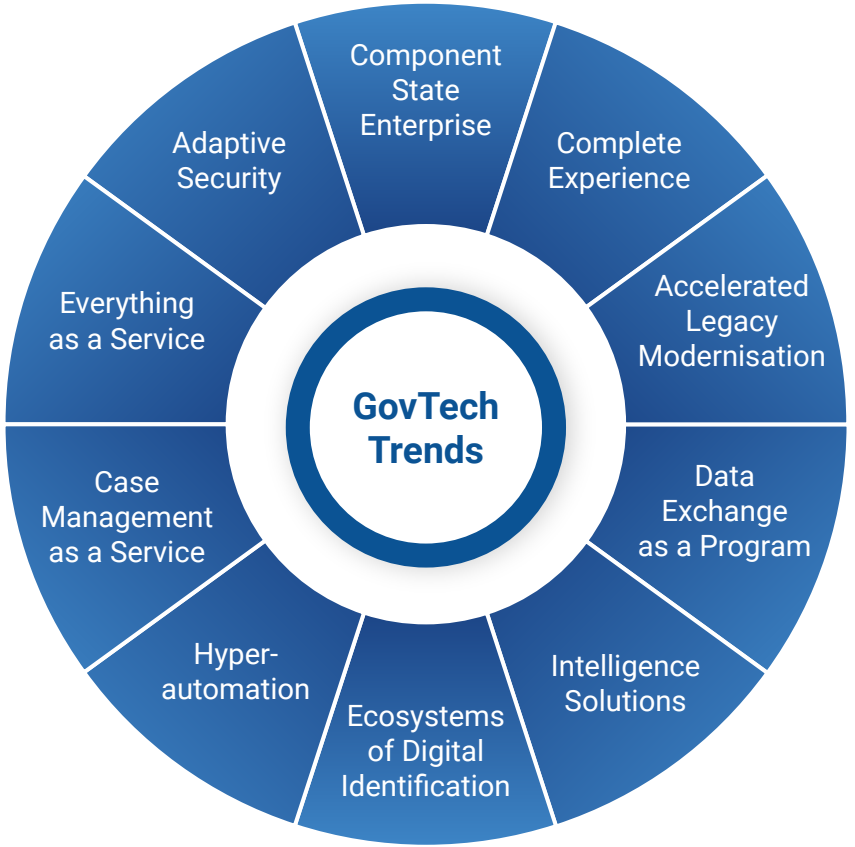


GovTech Trends

Technologies that improve organisations and people's lives are more powerful (and more important) than ever before. Forward-thinking governments and organisations understand the technological forces around them and look for ways to harness them for the benefit of citizens and constituents alike.

The pandemic continues to pose unique challenges for governments: a health crisis coupled with massive economic disruption and unprecedented demands for social support.

The Organization for Economic Co-operation and Development (OECD) put it this way: "The biggest lessons of the crisis are that governments will need to respond to future crises quickly and at scale, while maintaining trust and transparency." Even as the pandemic reluctantly retreats, governments have begun to build for the future.



Sources: Deloitte, Gartner

GovTech Challenges

GovTech Challenges

Public Sector

Procurement processes in innovation mechanisms are considered uncertain and risky. Setting them up takes a lot of time, can use too many resources and have an uncertain result. In addition to risk perception, public institutions shy away from participating in public procurement of process innovations because they consider the task itself too difficult and the problem too complex to be able to solve.

Private Sector

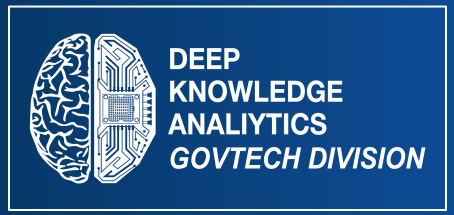
Dependence on venture capital is accompanied by the expectation of growth in conditions of limited market space.

A consolidated market space dominated by large system integrators.

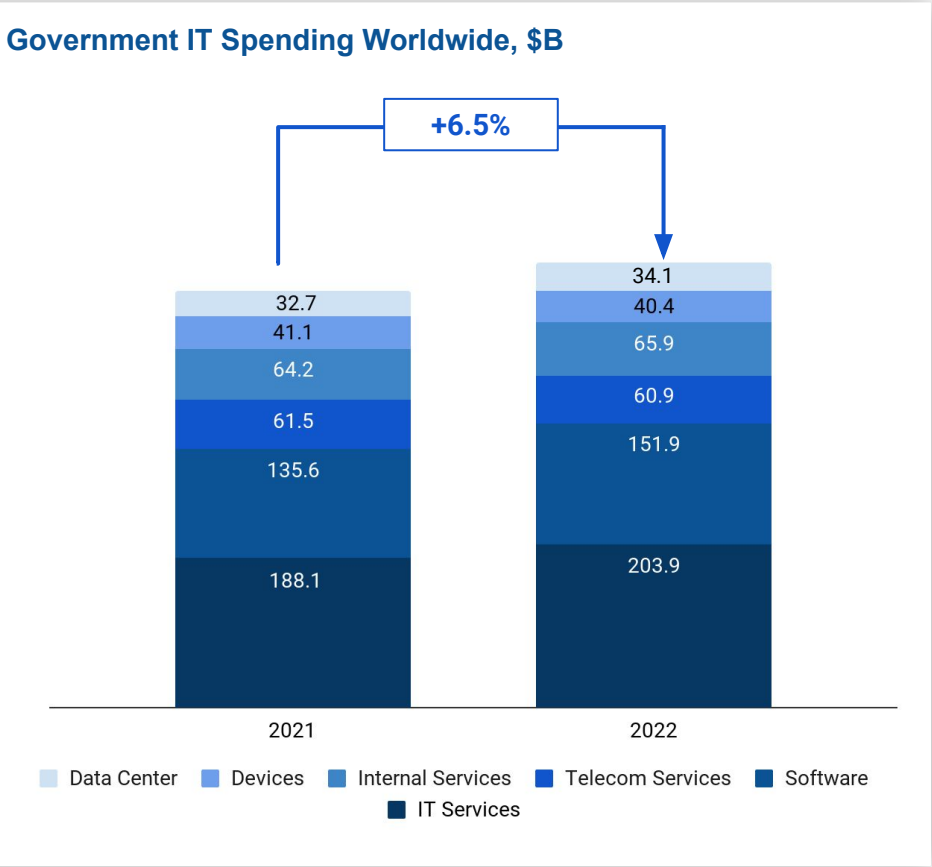
Entry barriers: EU procurement standards for digital solutions in the public sector can be difficult to navigate for startups that lack the experience to interpret and implement them.

Sources: Insider Intelligence

Key Findings and Predictions



GovTech Future Projections



It is clear that digital technology is driving change around the world, and COVID-19 is accelerating that process. Digital transformation is disrupting industry structures and business models. It is estimated that **70% of the new value created in the economy over the next decade will be based on digital platform business models.**

According to Gartner's latest forecast, global government IT spending will reach $557.3 billion in 2022, up 6.5% from 2021. **Governments will spend 64% of total IT spending in 2022 thanks to increased investment in digital technologies**. IT services and software to improve the efficiency and resilience of public services. These include investments in improving the customer and employee experience, strengthening analytical capabilities and scaling operational agility. The modernisation of IT infrastructure and applications, as well as the digital transformation of the government, will remain the main priorities of the government in 2022. In addition, the COVID-19 economic relief funding packages, such as the March 2021 American Rescue Plan and NextGenEU, will facilitate further funding for digital capabilities, including supporting sustainable growth, social programmes, education, cybersecurity and digital inclusion.

Sources: Gartner

About GovTech Division of Deep Knowledge Analytics

GovTech Division of Deep Knowledge Analytics is researching the trajectory of the GovTech industry by focusing on factors driving the ongoing transformation of a state, main sectors to be changed, barriers to this process and ways to overcome them. It also provides information on the main types of technologies used by GovTech including AI and machine learning, IoT, blockchain, robotic automation, and geospatial data analysis, with emphasis on the best examples of their implementation including decrease of time and complexity in public-private information exchanges, reduction of bureaucracy and corruption, improvement in automation, transparency, and accountability of information.

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About Deep Knowledge Analytics

Deep Knowledge Analytics is a DeepTech focused agency producing advanced analytics on DeepTech and frontier-technology industries using sophisticated multi-dimensional frameworks and algorithmic methods that combine hundreds of specially-designed and specifically-weighted metrics and parameters to deliver sophisticated market intelligence, pragmatic forecasting and tangible industry benchmarking.

It is an analytical subsidiary of Deep Knowledge Group, an international consortium of commercial and non-profit organisations focused on the synergetic convergence of DeepTech and Frontier Technologies (AI, Longevity, MedTech, FinTech, GovTech), applying progressive data-driven Invest-Tech solutions with a long-term strategic focus on AI in Healthcare, Longevity and Precision Health, and aiming to achieve positive impact through the support of progressive technologies for the benefit of humanity via scientific research, investment, entrepreneurship, analytics and philanthropy.

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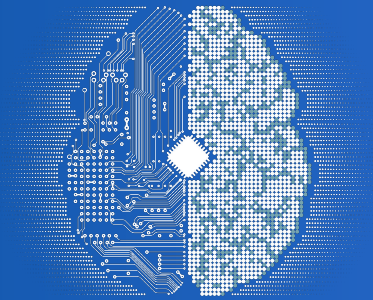

Link to the Report: www.govtech.global/global-govtech-industry-q2-2022

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