Innovating governments

Driving innovation to deliver better public services

Content

Foreword

What does innovation mean for government bodies? Is innovation possible within the public sector? How can government bodies foster innovation in their jurisdictions? In this paper, we will explore the concept of innovation and discuss how government bodies can implement it.

We will discuss the roles of government in using innovation in the service of their citizens and residents. This role has multiple facets, including the implementation of public policies that foster the emergence and growth of innovation ecosystems. It also fosters innovation within government agencies to improve efficiency and create opportunities for constituents and prosperity for the nation.

When a government instills a culture of innovation, it permeates society and creates business and job opportunities. A vibrant local innovation ecosystem will in turn encourage public officials to question outdated policies, propose solutions to optimize spending, and explore new ways to address people's needs. Public and private innovation pollinate each other and it is the role of the government to initiate and maintain this healthy symbiosis. This guarantees

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> ## How can a government be innovative in the service of its citizens?

the long-term sustainability of the country's economic sovereignty. In this paper, we will examine how governments embrace innovation, the keys to their success, and the challenges they might face. Through examples of successful government-led innovations, we will present solutions used by different governments to achieve their goals.

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Governments are embracing innovation

What is government innovation?

Governments are primarily focused on creating value for the population. A good definition of innovation for government organizations is the journey to turn an idea into new value creation for citizens and other constituents. Innovation is not only the statement of an idea or a vision but the path from a vision to its effective adoption by the population through concrete means and with clear impact. This definition is both actionable and measurable, which makes it possible to precisely target the concerned stakeholders, define the means used, and establish a clear link with the expected results.

From developing new policies and procedures to introducing new technologies, governments at all levels embrace innovation to improve the services they offer and make their operations more efficient. Increasingly, they are also recognizing the value of leveraging their citizens' creativity and entrepreneurial spirit to drive innovation.

It should be noted that technology is not always a prerequisite to enabling value creation. Many social, organizational, or urban innovations require limited technology or can be a new or smarter way to implement existing technologies. Technology is one of the enablers of innovation — it can trigger an innovative idea, or an innovative idea might require new technology — but it is certainly not the only one.

How do regulations fit into government innovation?

Government organizations acknowledge the importance of pre-existing conditions for innovation and are revisiting their policies and processes to ensure that they are not barriers to innovation, but catalysts for it. There are two challenges that governments face in promoting innovation:

- Encouraging the occurrence of innovation in their jurisdiction.

- Avoiding being an unconscious obstacle to innovation.

The theme of innovation is prevalent throughout many different government initiatives to help increase value to citizen services. The success of these endeavors lies in the population's adoption of these reforms. For a government to succeed in innovation, it needs a supportive infrastructure and the right regulations to encourage innovation adoption. There is no one-size-fits-all solution for innovation, and each government body needs to tailor its innovation strategy according to its own stakeholders' needs and resources.

With adoption and value creation as key performance indicators (KPIs), it is clear that compared to startups and corporations, governments have a lot more control over the means to be successful in getting constituents to adopt new concepts and create value – hence innovating.

Why are governments prioritizing innovation?

One of the reasons governments innovate is to stay relevant to their constituents. It must be the foundation of any government innovation program, from job creation to economic diversification, from soft power establishment to technological sovereignty enablement. Another reason to innovate government processes is to be a role model and foster innovation among constituents. There are different types of innovation, such as social, process, services, and urban innovation. Whatever type of innovation a government undertakes, the double objective is to be a role model in terms of innovation and to resolve an issue that is impacting the population.

Existing issues that governments try and resolve can be intrinsic (outdated processes, outdated regulation, excessive red tape, etc.) or extrinsic (environmental challenges, social changes, foreign threats, etc.). Once identified, grievances are listed and prioritized depending on their impact on contextual history, culture, economy, and sovereignty, among other dimensions. This priority list then guides innovative projects in each government sector.

People might argue that not all innovation is motivated by population satisfaction. For instance, spending efficiency. At first glance, it is a significant trigger for government innovation projects that might not be directly related to citizens' daily lives. However, spending efficiency offers a double advantage to staying relevant for citizens:
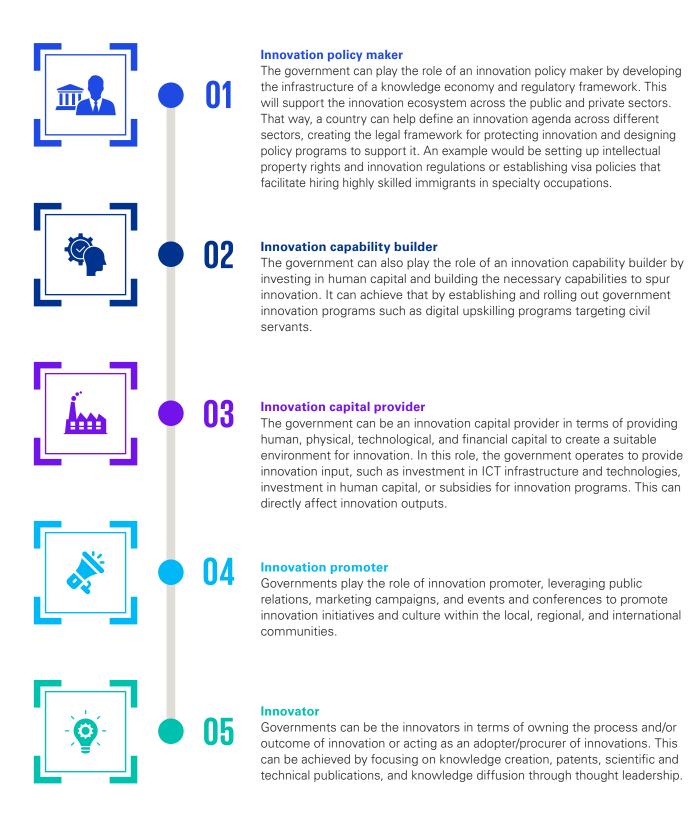
- Spending less to offer the same service forces public servants to find ways to be more efficient and innovative.

- Spending efficiency will create sufficient room for maneuvering to offer new services to constituents.

What roles do governments play as innovators?

Governments may play many roles in the innovation ecosystem.

01

Innovation policy maker
The government can play the role of an innovation policy maker by developing the infrastructure of a knowledge economy and regulatory framework. This will support the innovation ecosystem across the public and private sectors. That way, a country can help define an innovation agenda across different sectors, creating the legal framework for protecting innovation and designing policy programs to support it. An example would be setting up intellectual property rights and innovation regulations or establishing visa policies that facilitate hiring highly skilled immigrants in specialty occupations.

02

Innovation capability builder
The government can also play the role of an innovation capability builder by investing in human capital and building the necessary capabilities to spur innovation. It can achieve that by establishing and rolling out government innovation programs such as digital upskilling programs targeting civil servants.

03

Innovation capital provider
The government can be an innovation capital provider in terms of providing human, physical, technological, and financial capital to create a suitable environment for innovation. In this role, the government operates to provide innovation input, such as investment in ICT infrastructure and technologies, investment in human capital, or subsidies for innovation programs. This can directly affect innovation outputs.

04

Innovation promoter
Governments play the role of innovation promoter, leveraging public relations, marketing campaigns, and events and conferences to promote innovation initiatives and culture within the local, regional, and international communities.

05

Innovator
Governments can be the innovators in terms of owning the process and/or outcome of innovation or acting as an adopter/procurer of innovations. This can be achieved by focusing on knowledge creation, patents, scientific and technical publications, and knowledge diffusion through thought leadership.

Prerequisites for success

Regardless of what level or what model of innovation is adopted, ensuring successful innovation efforts in the public sector requires certain prerequisites that put people at the center of these efforts.

Allowing a culture of failure
In some regions of the world, the local culture emphasizes excellence and makes it difficult to accept failure. This becomes an issue because failure is a part of innovation. Governments need to create a safe space for people to make mistakes without retaliation and develop a culture of learning rather than a culture of excellence. For example, public sector agencies can launch innovation contests as part of their annual programs and switch employees' focus from their existing transactional day-to-day jobs to collaborative roles to address eminent problems.

Building people's capabilities in innovation
Capacity development among public sector employees is an essential method for developing better conditions for innovation. Public sector employees need to learn to proactively engage with the future rather than innovate only in times of crisis. Innovation needs to be embedded in the daily practices of public sector work through deliberate innovation capacity programs that teach practical tools related to systems thinking, foresight, agile project management, and design thinking.

Enabling an innovation ecosystem
Strengthening innovation ecosystems to develop long-term competitiveness and sustainability is critical. The government can act as a catalyst to create conducive ecosystems by focusing innovation on critical societal issues and providing funding, coordination, and strategy to reduce friction. They can also leverage external innovation and harness private sector capabilities to deliver on their goals. Governments can also adopt new ways of pursuing their traditional goal of supporting commercial innovation by reducing the market risks of emerging technologies through research and development (R&D) grants, tax credits, and other tools.
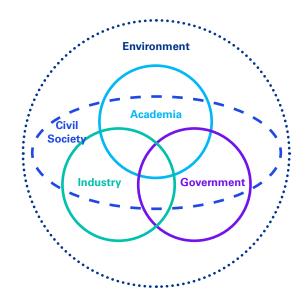
Synergies required to address challenges

One of the main challenges—not only for governments but for any organization willing to innovate and create value—lies at the frontier between Research & Development (R&D) and innovation. For instance, it is far from automatic to turn patents produced by universities or research labs into products and services offered by businesses that will generate jobs.

To remove the de-facto silos and to challenge historical organization, more and more countries are moving R&D and Innovation (RD&I) under the authority of one dedicated structure. This structure will put policies and mechanisms in place to "connect the dots" among the key players. The government can define priority issues and devise a National Innovation Strategy (NIS) with a Regional Innovation Strategy (RIS) to eliminate discontinuities in the RD&I value chain.

For instance, in Saudi Arabia, the government has established a Research Development and Innovation Authority (RDIA) responsible for identifying innovation opportunities and developing policies to support them. The RDIA is invested in research and development and stimulates a culture of innovation within the economic fabric.

For a decade now, the Quintuple Helix model has been a framework for describing the importance of reciprocal interactions within a knowledge economy. This includes: 1) an education system, 2) an economic system, 3) a natural environment, 4) a media-based and culture-based public (also called civil society), 5) and a political system.

By Elias G. Carayannis - Carayannis, Elias G.; Barth, Thorsten D.; Campbell, David F. J. (2012-08-08).

Experience has proven that the Quintuple Helix model is efficient when the crucial initial step of identifying the key Knowledge Economy Leaders (KEL) is carefully undertaken. For each "helix," a leader (or a committee of RD&I experts) must be in charge of urging ecosystem cross-pollination.

It is important to highlight the importance of governments in the ecosystem. Especially in the GCC region, they play a large role, often across more than one of five of these critical actors. As a facilitator, the government will favor discussion, collaboration, and initiatives among the KEL by multiplying opportunities to initiate and deliver innovative projects. Without governmental leadership, enabling a thriving innovation ecosystem can be compromised.

R&D and innovation are connected, but new value creation is not always due to technology

Research & Development		Innovation
INVESTMENT	**KNOWLEDGE**	**ROI2*** or new value
Scientific or technologic idea	Intellectual property	Value creation
Business idea	Social innovation New business models Workplace organization	*Return on innovation investment

How does government innovation serve society around the world

All across the world, governments innovate to stay relevant and impactful in our volatile, uncertain, complex, and ambiguous world. Government innovation is focused on creating value for the population, which can be in the form of improving access to government services, improving standards of living, providing access to resources, protecting citizens' wellbeing, nurturing entrepreneurship, adopting new technologies, and creating job opportunities among many others. Countries have found disparate innovative approaches to address local concerns affecting their communities, as well as pervasive issues that occur across governments.

Transportation

Lack of access to transportation in certain regions can have a detrimental effect on the lives of citizens who cannot find gainful and stable employment due to an inability to commute. In South Bend Indiana, in the United States, the local government has sponsored a pilot program called Transportation as a Benefit (TaaB). A network of independent transportation providers such as Uber and Waze Carpool meets the needs of employees and employers that have adopted the program. In Surabaya Indonesia, the city has taken a different approach and launched Surabaya Bus, which allows residents to pay bus fare with recyclable bottles. Commuters can bring bottles to the bus or exchange them for tickets at dedicated spots around the city. This allows citizens lacking financial means to become mobile.

Health and wellness

Health and wellness have been at the forefront of the global consciousness in the past few years due to the global Covid-19 pandemic. Governments have found various ways to utilize technology to tackle the spread of the virus and to protect their citizens. In Saudi Arabia, the Saudi Data and AI Authority developed the Tawakkalna app to help Saudi citizens and residents navigate the pandemic in their daily lives. The app provides a variety of services, primarily confirming the user's Covid-19 credentials to the relevant authorities, as well as providing medical news from the Ministry of Health regarding the illness, its transmission, prevention methods, and mobility permits. Saudi Arabia was awarded the UN Public Service Awards earlier this year, by the UN Department of Economic and Social Affairs, for the Tawakkalna app.

In the pursuit of general health and wellness for its citizens, Canada has launched the Carrot Rewards wellness app. It is an innovative public-private partnership and has become one of the most popular wellness apps in the country. It combines gamification and behavioral insights to nudge constituents towards better decisions regarding healthy living and environmental sustainability while rewarding them with points that they can use for loyalty rewards programs.

Technology is a common undercurrent in countries' efforts to bolster the health of their residents. In Mongolia, the government is harnessing the creative use of blockchain and AI to track batches of medicine along every step of the supply chain to catch and eliminate counterfeits. The country suffers from thousands of deaths and the loss of billions of dollars due to 40 percent of medicine being fake. Through partnering with the private sector and utilizing new technology, the government aims to thwart the counterfeit medicine market.

Improving government services

Governments have made a great effort to keep up with the digital upheaval of the world and have looked inwards to innovate themselves and digitize their services. In the UK, the digital by default policy adopted in the United Kingdom is a significant innovation in e-government that has improved access to government services for citizens and businesses while significantly reducing paperwork. The e-KTP project in Indonesia is another excellent example of innovation in government services. This project, which uses biometric data to issue electronic ID cards, has helped reduce fraud and improve the efficiency of government services.

In Singapore, the One Service initiative has been implemented to improve service quality and reduce waiting times for citizens. The initiative provides a single point of contact for all government services, whether online, by phone, or in person. In India, the Digital India initiative was launched in 2015 to make government services more accessible to citizens through technology. The initiative includes several measures to improve digital connectivity, increase access to government services, and promote digital literacy.

In Estonia, the e-Estonia platform provides an environment conducive to developing digital innovation within the public sector. e-Estonia is the digital society of Estonia, which facilitates citizens' and residents' interactions with the state and includes 99 percent of public services, which are available online 24 hours a day. The platform includes healthcare, identity, smart city and mobility, education, cybersecurity, and ease of doing business services. e-Estonia has successfully attracted international attention and has been cited as a model for other countries looking to digitize their public sector.

Encouraging innovation in the GCC region

The GCC region has also been active in government innovation initiatives. For instance, the UAE, through its innovation strategy, wants to become a world leader in innovation. The country has established itself as a significant innovation hub in the region and is home to many global tech companies. In Qatar, the Qatar National Vision 2030 aims to make Qatar a leading knowledge-based economy. The country has made significant investments in innovation, including establishing an innovation lab and launching an entrepreneurship program.

Bahrain is also working on its innovation strategy to become a regional leader in innovation. The country has set up an innovation fund and is working on several initiatives to promote innovation, such as developing an innovation ecosystem and launching an accelerator program. Oman has improved its policies for better management of oil revenues (e.g., Tawteen) and water resources. In Kuwait, the government has launched several initiatives to promote innovation, such as the Kuwait National Innovation Strategy and the Kuwaiti Startup Ecosystem.

Many countries in the region are working on strategies to improve their government services. We can expect to see more innovation in government services in the future as these countries continue to invest in this area.

Government innovation in Saudi Arabia

Saudi Arabia has launched many innovation initiatives based on Vision 2030 and the National Transformation Program. The country has established several innovation hubs, such as the King Abdullah University of Science and Technology and the Prince Mohammed bin Salman bin Abdulaziz University for Digital Sciences and Technology.

The Kingdom has dedicated a large part of its innovation efforts inwards and focused on digital government as a critical initiative. The Digital Government Authority (DGA) works to support government entities in their digital transformation to provide digital government services. Saudi Arabia climbed the ranks to the 31st position in the United Nations' ranking of its 193 member states' digital government programs, an improvement from 52nd in 2018.

DGA showcases Saudi Arabia's innovation efforts, which are geared towards improving the experience and lives of citizens, enhancing the adoption of emerging technologies, and identifying the needed regulatory change to support ongoing innovation.

Through DGA's Innovation and Emerging Technology Center, government agencies have access to a wide range of services. The center works on vetting technologies and use cases, matching them with specific challenges and opportunities, conceptualizing business models, and testing and implementing solutions. For example, the center has been collaborating with various entities to determine how drones can be effectively used to speed blood-sample transfer among hospitals.

Government innovation is often geared towards improving standards of living and job creation and Saudi Arabia's National Transformation Program has identified innovation powered by research and development as a vital enabler of its long-term socioeconomic goals. The government has established the earlier mentioned RDIA responsible for identifying innovation opportunities and developing policies to support them. A new program for the research, development, and innovation (RDI) sector aims to inject an additional SAR60 billion (US$16 billion) into the nation's GDP by 2040. The initiative will create job opportunities in science and technology, and facilitate

the Kingdom's quest to become the Arab world's largest economy. Saudi Arabia also aims to attract US$20 billion in investments in data and AI. This strategy will transform the workforce through training a pool of 20,000 AI and data specialists.
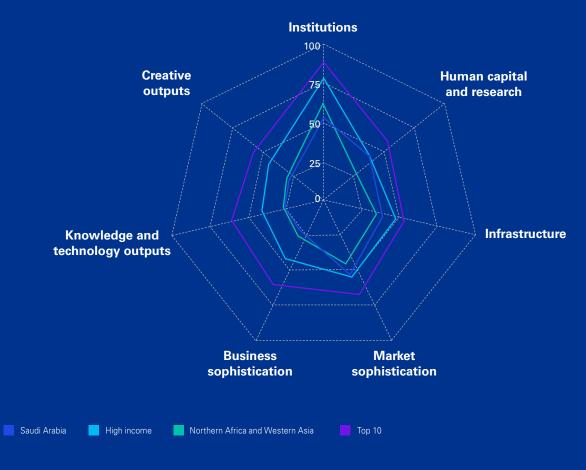
Saudi Arabia has also sought to align its workforce localization efforts with its Vision 2030 goals and to go to great lengths to protect and strengthen the local workforce. A wave of Saudization measures has already been introduced and implemented in the last couple of years, with Saudization ratios coming into effect in many new industries and professions. Companies falling foul of the requirements might find their business activities suspended, including the issuance of work visas. Beyond the local workforce, Saudi Arabia has also implemented expat-friendly initiatives through updates to the Kafalah immigration sponsorship system.

Along with these efforts, the Kingdom has sought to foster an environment conducive to entrepreneurship.

One example of such initiatives is the establishment of Small and Medium Enterprises General Authority (Monsha'at) in 2016. Monsha'at aims to regulate, support, develop, and sponsor the SME sector in the Kingdom to increase their contribution to GDP from 20 to 30 percent by 2030. Monsha'at develops and supports programs that foster a culture of self-employment, entrepreneurship, and innovation and organizes direct and indirect lending programs for SMEs and fast-growing unicorns.

Saudi Arabia is investing heavily in building an innovation ecosystem to bring digital transformation to its operations and create a culture of innovation for its citizens. Despite this push, the Kingdom's Global Innovation Index (GII) ranking is 66th among the 132 economies featured in the GII 2021. There is certainly no shortage of funding or political will to create a culture of innovation in the Kingdom, but there is still a gap between government investment and its impact on innovation.
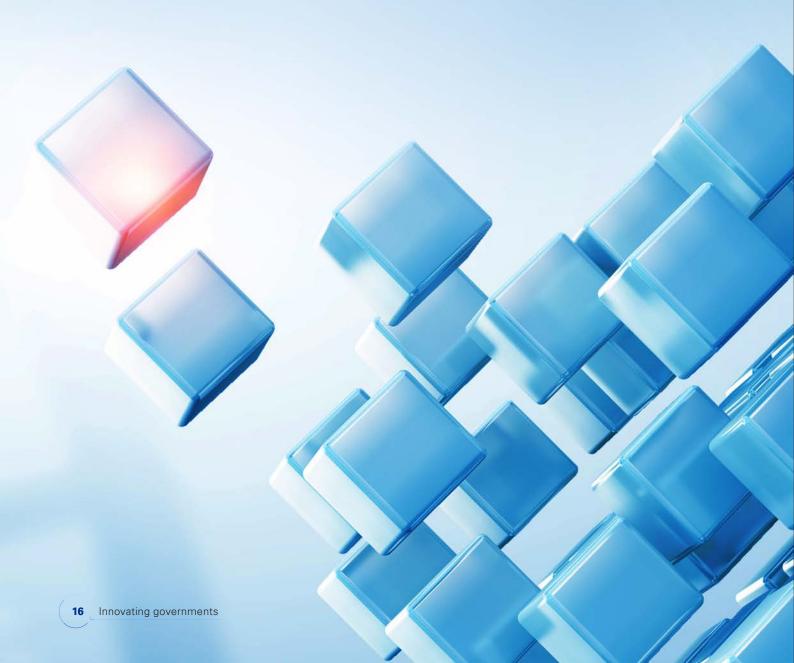
The seven Gil pillar scores for Saudi Arabia

Saudi Arabia · High income · Northern Africa and Western Asia · Top 10

Source: GII 2021 – Saudi Arabia https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2021/sa.pdf

The path to ongoing innovation and progress

Innovation is a journey, not a destination, and should be seen as an ongoing process. It should be integrated into the way government bodies work daily, and they must invest in internal innovation literacy to foster innovation in the country. Innovation is not only about developing new products and services but about creating new ways of doing things. It should be seen as an opportunity to improve the way government bodies work.

Governments must also create an environment that is conducive to innovation. This includes investing in research and development, establishing supportive policies, and creating a culture of innovation within the government itself. Only by taking these steps will government bodies be able to effectively innovate and make a positive impact on society.

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Further reading

This publication comes as part of series of two on innovation and regulation. Download the other publication through link below.

Regulating for innovation

Building a regulatory environment that is conducive to innovation.

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