

# Axellec

## **The Evolving Landscape of Data Regulation in the Gulf region**

Insights into Data and AI Strategies, Governance,  
and Regulatory Bodies maturity level

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# Gulf countries aim to enhance data regulation to establish a sustainable foundation for Data&AI growth



## Key Research Insights

1.

### Variability

Gulf countries show different levels of data regulation maturity, with three main groups: **advanced** (Saudi Arabia and UAE), **developing** (Qatar, Bahrain, Oman), and **emerging** (Kuwait).

2.

### Personal Data Protection First

Countries in all groups have data privacy laws, special agencies to protect data, regulations for cross-border data flows, and open data portals. These are basic practices for data regulation and are usually the first steps countries take in data governance regulation.

3.

### Advancing to AI

After establishing basic data regulation practices, the next step is implementing an AI strategy and a digital-government strategy. All countries in the advanced and developing groups have completed these strategies.

4.

### The Crucial role of Data

The most challenging elements to implement—data strategy and data governance frameworks—have been established only in the advanced group. We assume that, recognizing the crucial role of data in AI development, these governments are working to build a strong foundation for AI projects through effective data governance

5.

### Rapid Progress

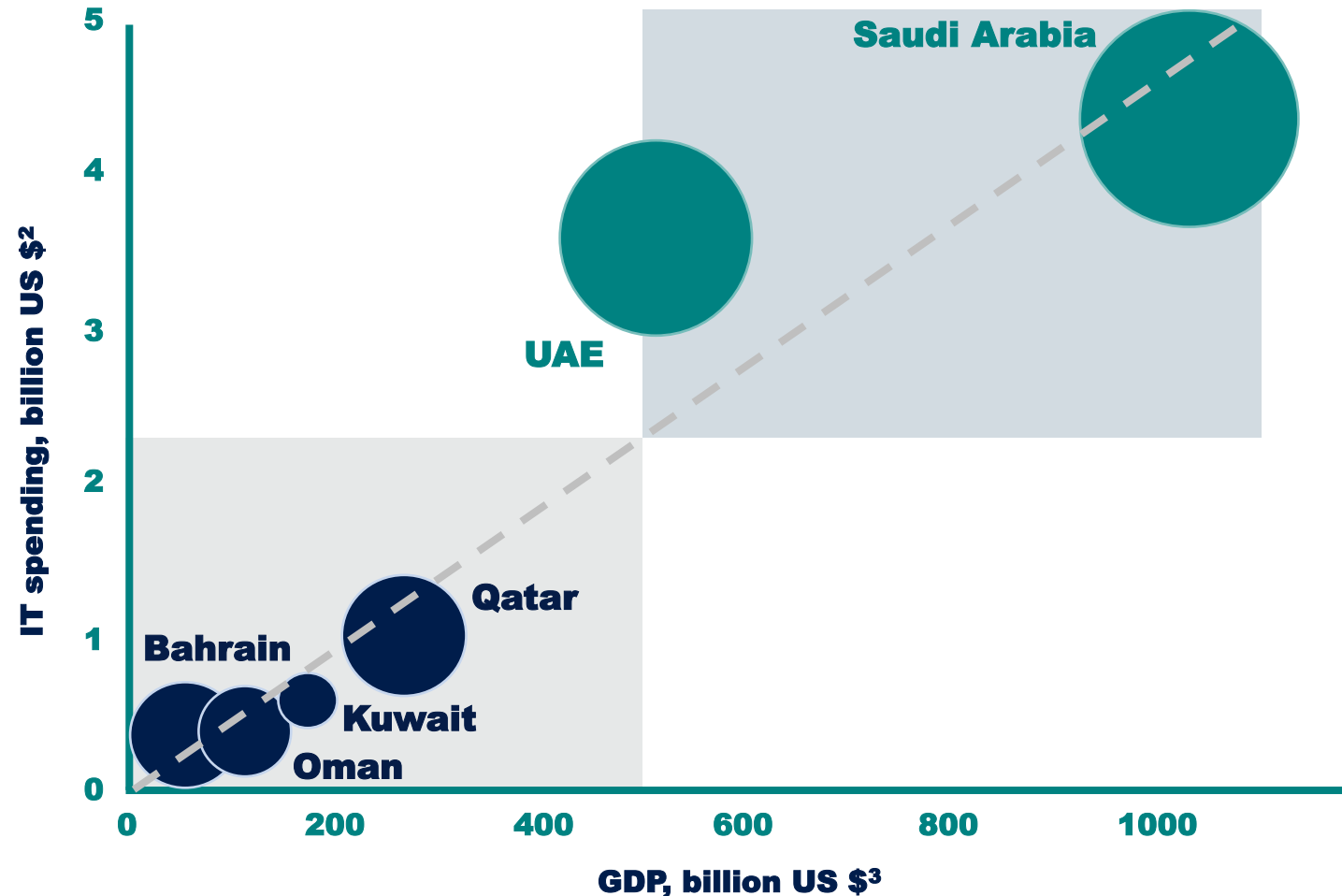
Most documents have been implemented over the last two years, with more regulations currently under discussion. Two developing countries, Qatar and Oman, are planning to create data strategies, the next complex element in the data regulation suite. Additionally, Qatar and Bahrain are working on establishing data governance frameworks. Based on these efforts, Qatar is preparing to join the advanced group.

6.

### Commercial Activity Drives Data & AI Regulation

The increase in IT spending and GDP growth among Gulf countries is closely linked to the level of data and AI regulation.

# The increase in IT spending and GDP value correlates with Data&AI regulation maturity



The size of each circle represents the Data & AI Regulation Maturity Score

## Key Insights

- **IT spending** strongly<sup>1</sup> correlates with countries' **GDP** together with **Data Regulation Maturity** with correlation coefficient of 0.94.
- Based on these statistics, we can identify two groups: those with **advanced data maturity** (led by Saudi Arabia, followed by the UAE) and those with **developing& emerging** data maturity (Qatar, Oman, Kuwait, Bahrain).
- Wealthier economies tend to have more resources to invest in advanced data management systems and strategic planning, leading to a more deliberate and structured approach to harnessing the power of data and AI for national development

# Data&AI Regulation Maturity Score



Attributes	Saudi Arabia	UAE	Qatar	Bahrain	Oman	Kuwait
Data Strategy	Exists (2 points)	Exists (2 points)	In progress (1 point)	No (0 point)	In progress (1 point)	No (0 point)
Data Strategy in Entities	Exists (2 points)	Exists (2 points)	No (0 point)	No (0 point)	No (0 point)	No (0 point)
AI Strategy	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	No (0 point)
Digital-Government strategy	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	No (0 point)
Overall Data Governance Framework	Exists (2 points)	No (0 point)	Exists (2 points)	No (0 point)	No (0 point)	No (0 point)
Data Governance Framework in entities	Exists (2 points)	Exists (2 points)	No (0 point)	No (0 point)	No (0 point)	No (0 point)
Open Data Portal	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	In progress (1 point)
Open Data coordinating body	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	No (0 point)	No (0 point)
Public sector data governance body	Exists (2 points)	Exists (2 points)	No (0 point)	Exists (2 points)	No (0 point)	No (0 point)
Data privacy rules	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)
Personal Data protection body	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)
Non-governmental data sharing guidelines	Exists (2 points)	Exists (2 points)	No (0 point)	No (0 point)	Exists (2 points)	No (0 point)
Regulations on cross-border Data Flows	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)	Exists (2 points)
	26	25	17	16	15	7
	ADVANCED		DEVELOPING		EMERGING	

Exists (2 points)  
 In progress (1 point)  
 No (0 point)  
 Total number of points

# Saudi Arabia excels in Data & AI Regulation, offering opportunities for stronger business Data Governance



**53%**

of Saudi Arabia companies **positively rated the ability of their analytics tools to handle complex AI-related data sets...**

**while...**

**85%**

admitted that their **data exists in silos across the organization**

**37%**

do not have **systematic mechanisms to detect data biases**

**75%**

say that their **analytics tools are not fully integrated with data sources** and AI platforms being used

**24%**

have **lack systematic correction** mechanisms or have no formal processes for rectification, even if biases and lack of fairness are detected in data

**35%**

have either untested, basic protocols, or none at all for **responding to data breach or privacy violation**

A comprehensive organizational **Data Strategy** and robust **Data Governance Framework** are crucial for overcoming these challenges, enabling companies to manage data as a strategic asset and be fully prepared for the AI era



# Breakdown by country

# Saudi Arabia



Data Strategy	
Data Strategy in Entities	
AI Strategy	<p><b><u>National Strategy for Data &amp; AI.</u></b> Saudi Data &amp; AI Authority (SDAIA) was created to set the national Data &amp; AI agenda for the Kingdom, orchestrate implementation of Data &amp; AI agenda across the government, and oversee agenda execution across its child entities – National Information Center (NIC), the National Data Management Office (NDMO), and the National Center for Artificial Intelligence (NCAI). National Strategy for Data &amp; AI covers key components of their work and creates longterm vision for Data&amp;AI practices</p>
Digital-Government strategy	<p><b><u>The Digital Government Authority of Saudi Arabia</u></b> paves the way for government agencies to provide digital services of high quality and efficiency that contribute to raising investment returns and raising the value of the national economy, and work to measure the performance and capabilities of government agencies in the field of digital government, to achieve beneficiary satisfaction.</p>
Overall Data Governance Framework	<p>SDAIA and NDMO have created a <b><u>data governance framework</u></b> at the national level that outlines the laws and regulations for national data management and governance as well as the protection of personal data.</p>
Data Governance Framework in entities	<p><b><u>National Data Governance regulation</u></b> obliges public entities to form data governance function based on its principles</p>
Open Data Portal	<p><b><u>Link</u></b></p>
Open Data coordinating body	<p>NIC is responsible for developing, hosting, and operating the National Data Bank and the national foresight platforms. NIC's responsibilities shall include: Manage National Open Data Portal, Authorize and Guide Portal Participation, Capture Portal Usage Trends. (<b><u>Open Data Policy</u></b>)</p>
Public sector data governance body	<p>Saudi Data &amp; AI Authority (SDAIA)</p>
Data privacy rules	<p><b><u>Personal Data Protection Law</u></b> (issued in 2021, amended in 2023, comes into force in sept.2024)</p>
Personal Data protection body	<p><b><u>SDAIA is the competent and supervising authority</u></b> for the implementation of the Personal Data Protection Law provisions and regulations.</p>
Non-governmental data sharing guidelines	<p>Regulated by PDPL</p>
Regulations on cross-border Data Flows	<p>Regulated by PDPL</p>



<b>Data Strategy</b>	<a href="#">Smart Data Strategy</a> . Smart Data is central to the UAE National Plan for Smart Government. Smart Data – that is, data which can be used efficiently and effectively within government and which encourages use of open data to drive engagement and innovation - is a key enabler for each of the four pillars for the National Plan.
<b>Data Strategy in Entities</b>	<a href="#">Dubai Data Strategy</a> works to enable Dubai to achieve its smart city vision of becoming the happiest city, manage data based on clear guidelines aligned with international best practices, achieve integration and harmony between the services provided by federal government agencies and local government bodies and optimise use of data for data providers.
<b>AI Strategy</b>	UAE National Strategy for Artificial Intelligence 2031
<b>Digital-Government strategy</b>	<a href="#">UAE Digital Government Strategy 2025</a>
<b>Overall Data Governance Framework</b>	<a href="#">The UAE Smart Data Framework</a> contains key business rules and operating principles for data governance in public entities, while specific Data Governance framework doesn't exist.
<b>Data Governance Framework in entities</b>	Several public entities design their own detailed data and model management instructions, i.a <a href="#">MOHAP : Enterprise Data Management Framework</a> , <a href="#">Model Management Standards (Central Bank of UAE)</a>
<b>Open Data Portal</b>	<a href="#">the UAE official Open Data Portal</a> provides enhanced open data systems for public use
<b>Open Data coordinating body</b>	The Federal Competitiveness and Statistics Authority (FCSA) is responsible for managing and updating this data portal . It supports all UAE institutions and individuals, as well as international partners, across all sectors.
<b>Public sector data governance body</b>	<a href="#">Telecommunications and Digital Government Regulatory Authority</a>
<b>Data privacy rules</b>	<a href="#">Personal Data Protection Law</a> (2022)
<b>Personal Data protection body</b>	<a href="#">The UAE Data Office</a> will act as the federal data regulator in the UAE. The office will be responsible for preparing policies and legislations related to data protection, proposing and approving the standards for monitoring Personal Data Protection Law, preparing systems for complaints and grievances related to data, issuing guidelines and instructions for the implementation of the law.
<b>Non-governmental data sharing guidelines</b>	Regulated by PDPL
<b>Regulations on cross-border Data Flows</b>	Regulated by PDPL



# Qatar



<b>Data Strategy</b>	<a href="#"><u>In progress</u></a> A specialized Centre of Excellence for data and emerging technologies, such as AI, will be established to drive several initiatives. This includes the development of a comprehensive national data governance and management framework, ensuring improved data availability and quality.
<b>Data Strategy in Entities</b>	No
<b>AI Strategy</b>	<a href="#"><u>Qatar's National AI Strategy</u></a> is focused on six pillars: education, data access, employment, business, research, and ethics, that together will guide Qatar towards the transition to an AI future.
<b>Digital-Government strategy</b>	<a href="#"><u>Qatar e-Government 2020 Strategy</u></a>
<b>Overall Data Governance Framework</b>	<a href="#"><u>Data Management Policy</u></a> (recommendation) - DMBOK based Plans to establish data management catalog
<b>Data Governance Framework in entities</b>	No
<b>Open Data Portal</b>	<a href="#"><u>Qatar open data portal</u></a> is a national data platform that indexes, tabulates, disseminates analyzes and visualizes official statistics to facilitate their use.
<b>Open Data coordinating body</b>	Since the beginning of 2023, the responsibility for operating and managing this portal has been transferred to <a href="#"><u>the National Planning Council (NPC)</u></a> , which is working hard to build an open data platform, through a national partnership with the relevant ministries and government agencies to provide data by specific topics, which are easily displayed in different forms commensurate with the nature of the materials posted and the needs of users.
<b>Public sector data governance body</b>	No
<b>Data privacy rules</b>	<a href="#"><u>Personal Data Privacy Protection Law</u></a> (2016)
<b>Personal Data protection body</b>	<a href="#"><u>National Cyber Governance and Assurance Affairs</u></a> oversees Law No. 13; the Personal Data Privacy Protection Law (PDPPL) and therefore regulates data privacy in the State of Qatar.
<b>Non-governmental data sharing guidelines</b>	No
<b>Regulations on cross-border Data Flows</b>	Regulated by PDPL

# Bahrain



Data Strategy	No
Data Strategy in Entities	No
AI Strategy	<p><a href="#"><u>Accelerating Artificial Intelligence (AI) for Bahrain</u></a>            The vision of Bahrain's leadership to employ modern technologies such as Artificial Intelligence (AI) has improved government services and contributed to Bahrain's digital achievements. Bahrain recognizes the importance of Artificial Intelligence in streamlining processes and informs strategic decision-making of businesses across all industries and has taken steps in the study and application of AI in different fields. AI changed various areas of our lives and it's seen by Bahrainis a major source of achieving sustainable development in the kingdom.</p>
Digital-Government strategy	<a href="#"><u>Bahrain's digital Government strategy</u></a>
Overall Data Governance Framework	No
Data Governance Framework in entities	No
Open Data Portal	Government of Bahrain has launched its <a href="#"><u>open data portal</u></a> in 2013 with the intention of having it as a single portal for Statistics and open data content.
Open Data coordinating body	<a href="#"><u>The Information &amp; eGovernment Authority (iGA)</u></a> is the official government entity responsible for national statistics, information management, and data analytics. iGA is the central organization for national data integration with other respective government entities to facilitate streamlined public service delivery.
Public sector data governance body	
Data privacy rules	<a href="#"><u>Personal Data Protection Law</u></a> (2018)
Personal Data protection body	The Ministry of Justice, Islamic Affairs and Waqf was designated, to assume the duties of the <a href="#"><u>Personal Data Protection Authority</u></a>
Non-governmental data sharing guidelines	No
Regulations on cross-border Data Flows	Regulated by PDPL

# Oman



<b>Data Strategy</b>	<a href="#">National Data Strategy</a> represents an integrated regulatory framework for management and regulation of data generated by governmental and non-governmental entities. The strategy includes identification of the source and ownership of data, mechanisms for the exchange and integration of data, and their availability to governmental and non-governmental entities.
<b>Data Strategy in Entities</b>	No
<b>AI Strategy</b>	<a href="#">The National Program for AI and Advanced Technologies 2020</a>
<b>Digital-Government strategy</b>	<a href="#">The government digital transformation program 2021-2025</a> <a href="#">Digital Oman Strategy</a>
<b>Overall Data Governance Framework</b>	No
<b>Data Governance Framework in entities</b>	No
<b>Open Data Portal</b>	<a href="#">Data portal</a> is a free and data-sharing portal where anyone can access data relating to the Sultanate of Oman.
<b>Open Data coordinating body</b>	Creation and maintenance of this Open Data Policy is vested with the Information Technology Authority (ITA). <a href="#">National Centre for Statistics and Information (NCSI)</a> has the overall responsibility for facilitating the implementation of the Open Data Policy and providing advice and guidance to all government agencies, and target audience.
<b>Public sector data governance body</b>	No
<b>Data privacy rules</b>	<a href="#">Personal Data Protection Law</a>
<b>Personal Data protection body</b>	The Ministry of Transport, Communications and Information Technology (Ministry) is responsible for implementing the PDPL. The Minister of Transport, Communications and Information Technology will issue the executive regulations to the PDPL in due course.
<b>Non-governmental data sharing guidelines</b>	Regulated by <a href="#">Government Information Sharing Policy</a>
<b>Regulations on cross-border Data Flows</b>	Regulated by PDPL

# Kuwait



<b>Data Strategy</b>	No
<b>Data Strategy in Entities</b>	No
<b>AI Strategy</b>	No
<b>Digital-Government strategy</b>	No
<b>Overall Data Governance Framework</b>	No
<b>Data Governance Framework in entities</b>	No
<b>Open Data Portal</b>	<a href="#">Page with statistics</a>
<b>Open Data coordinating body</b>	No
<b>Public sector data governance body</b>	No
<b>Data privacy rules</b>	<a href="#">Data Privacy Protection Regulation</a> <a href="#">Kuwait: CITRA publishes new Data Privacy Protection Regulation 2024</a>
<b>Personal Data protection body</b>	Communication and information technology regulatory authority (CITRA)
<b>Non-governmental data sharing guidelines</b>	No
<b>Regulations on cross-border Data Flows</b>	Regulated by PDPL

# About the Research



The research is based on a comparison of main countries in the Gulf Region region in terms of basic **data regulation practices**. For the matrix 6 countries and 13 attributes were selected, giving 2 points for having or 1 point for developing the relevant law or body in the country.

**Key practices identified:** **Data Strategy**, **Data Strategy in Entities** (ministries, certain regions of the country), **AI Strategy**, **Digital-Government strategy**, **Overall Data Governance Framework** (country-wide), **Data Governance Framework in entities**, **Open Data Portal** (repository of public sector information), **Open Data coordinating body** (developing, hosting, and operating Open Data Portal), **Public sector data governance body** (the Institutionalized body responsible for coordinating public sector data assets), **Data privacy rules**, **Personal Data protection body**, **Non-governmental data sharing guidelines** (regulation of the exchange of non-governmental data), **Regulations on cross-border Data Flows** (rules for sharing data outside the country//for external agents).

The main goal of the study is to understand the specifics of regulation in MENA region, in order **to assess the level of maturity and readiness of legislative practices** to support local businesses in the development of management based on data and AI. This information can help to understand why some countries in the region are more or less successful in digitalization, **predicting future success in the development of advanced data practices** (AI, Data governance) and determine in which countries, in the future, business will be more successful.

Based on the results of the research, **a group of leading countries** (Saudi Arabia, UAE) that received 25+ points, **developing countries** (Bahrain, Qatar, Oman) that received 15-17 points and an **emerging country** (Kuwait) with 7 points were identified.