pwc

Part 2

Digital regulations:

Regulatory imperatives in an era of digital disruption

Table of contents

The evolving digital landscape in the Middle East calls for a revamped approach to building and governing regulations.

Introduction

The industrial revolution showcased the benefits of automation and humanity's drive for progress. Over time, this has pushed us through different phases of industrial development, from Industry 1.0 to the current Industry 4.0, where innovation and the rapid adoption of digital technologies are changing every aspect of the economy and society.

This digital era has led to the creation of new products, services, and business models, bringing both new opportunities and challenges. The use of advanced technologies is transforming industries, making them more efficient and opening up new growth possibilities. However, these advancements also come with responsibilities. The fast pace of digital change has highlighted important issues such as inclusion, accessibility, privacy, and the digital divide.

These concerns are now a top priority for regulators around the world, as they work to ensure that the benefits of technological progress are shared fairly and that everyone can participate in the digital age.

# Balancing innovation and consumer protection
ITU GSR 2023

Policymakers and regulators face the critical task of striking a balance between promoting innovation, supporting businesses while safeguarding consumers and their interests.

In 2023, the International Telecommunication Union (ITU) held its Global Symposium for Regulators (GSR) in Sharm el-Sheikh, Egypt (Regulation for a Sustainable Digital Future)[1]. The leaders of regulatory authorities from around the world came together to attend the 20th anniversary of GSR-23 and discussed key priorities for regulators, which included among others, the role of regulatory bodies in managing spectrum and orbit resources, consumer and business implications in the Metaverse, digital accessibility and affordability, regulation of e-waste from the ICT sector, and more.

Participants agreed on key measures to bridge the digital divide and enable widespread connectivity and affordability. This include creating a competitive environment, enabling widespread adoption of digital literacy and skills, supporting innovative solutions for connecting the unconnected and encouraging research and development of emerging technologies.

The rapid technological advancements are undeniably reshaping today's regulatory landscape. The speed and breadth of these technological innovations are unprecedented, bringing about transformative changes.

However, if insufficiently shaped by policy measures that cut across sectors as well as national boundaries, these disruptions can entail high risks by disrupting labour markets, creating issues with data privacy and ownership, security, as well as additional challenges related to ethical use of technology and data.
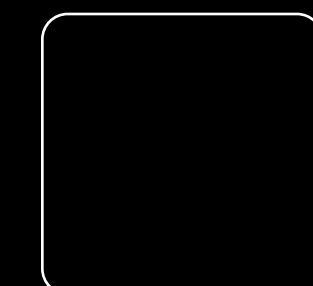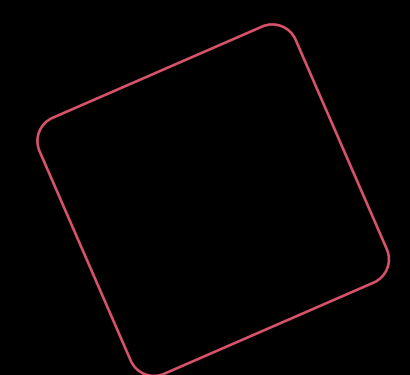
Key challenges

Against this background, here are some key challenges that are faced by regulators in the regions and globally.

1

Pacing problem

Digital technologies tend to develop faster than the regulation or social structures governing them. Adapting existing regulations or creating new ones to address emerging technologies like artificial intelligence (AI), blockchain, and the Internet of Things (IoT) presents a significant challenge.

2

Disruptive business model

New business models involve interventions from multiple sectors, however collaborative regulations are seldom available. Attributing ownership and liability in a shared economy scenario is rather difficult.
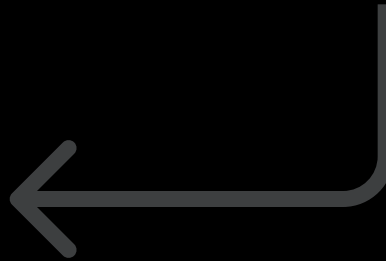
3

Data privacy and security

With the proliferation of digital services and platforms, regulators are grappling with enforcing stringent data protection laws and implementing measures to safeguard sensitive information against cyber threats and breaches. Examples include challenges in attributing liability when AI is involved.

4

Lacking integration

While interconnected and interoperable platforms enable the sharing of services, data, and applications across traditional sectors, current regulations are not designed to operate across these diverse platforms.

These challenges are often accentuated by extension of regulations across multiple jurisdictions and national boundaries.

01 Cross-border compliance

The borderless nature of the digital world poses challenges for regulators in enforcing compliance across jurisdictions. Limited coordination between international regulators causes issues in areas such as online content moderation, digital taxation, and intellectual property rights enforcement, among others.

02 Digital divide and access

Bridging the digital divide remains a significant challenge, with disparities in access to technology and digital infrastructure persisting globally.

03 Digital monopolies

The rise of tech giants and digital platforms has led to concerns about monopolistic practices and market dominance. Regulators face the challenge of balancing innovation and competition while preventing anti-competitive behaviour and ensuring a level playing field for all market players.

Best practices in regulatory transformation

While most national regulators are struggling with the adoption of such regulatory requirements, we have witnessed the precedence of a few regulators that are emerging as global best practices and leading the charge in regulatory adaptability.

Let us look at regulators in Australia, the UK, and the European Union (EU). The Australian Government has mandated positive cybersecurity obligations for businesses deemed 'critical infrastructure'[2], across 11 industries. These require over 2,000 businesses to develop a risk management programme addressing cyber security[3]. With the growing popularity of work-from-home, the Australian Cyber Security Centre was quick to release guidelines that outlined key cybersecurity practices.

In the UK, the Digital Regulation Cooperation Forum strengthens collaboration between key regulators such as Ofcom (UK's communications regulator), the Information Commissioner's Office (ICO), and the Competition and Markets Authority (CMA). This approach aims to harness collective expertise in the intersection of data, privacy, competition, communications and content[4].

In 2020, the European Commission proposed two legislative initiatives to upgrade rules governing digital services in the EU: The Digital Services Act (DSA) and the Digital Markets Act (DMA)[5]. The two main objectives of these acts being:

To create a safer digital space in which the fundamental rights of all users of digital services are protected

To establish a level playing field to foster innovation, growth, and competitiveness, both in the European Single Market and globally

Continuing with their lead, EU parliament has approved the Members of the European Parliament voted to pass the Artificial Intelligence Act (the "AI Act"), the world's first comprehensive law on artificial intelligence ("AI")[6].

Digital regulatory landscape
Middle East

Within the Middle East, countries are quickly adapting and modifying regulations to keep up with technological advancements.

NRC
CST

Regulatory Sandbox

VARA
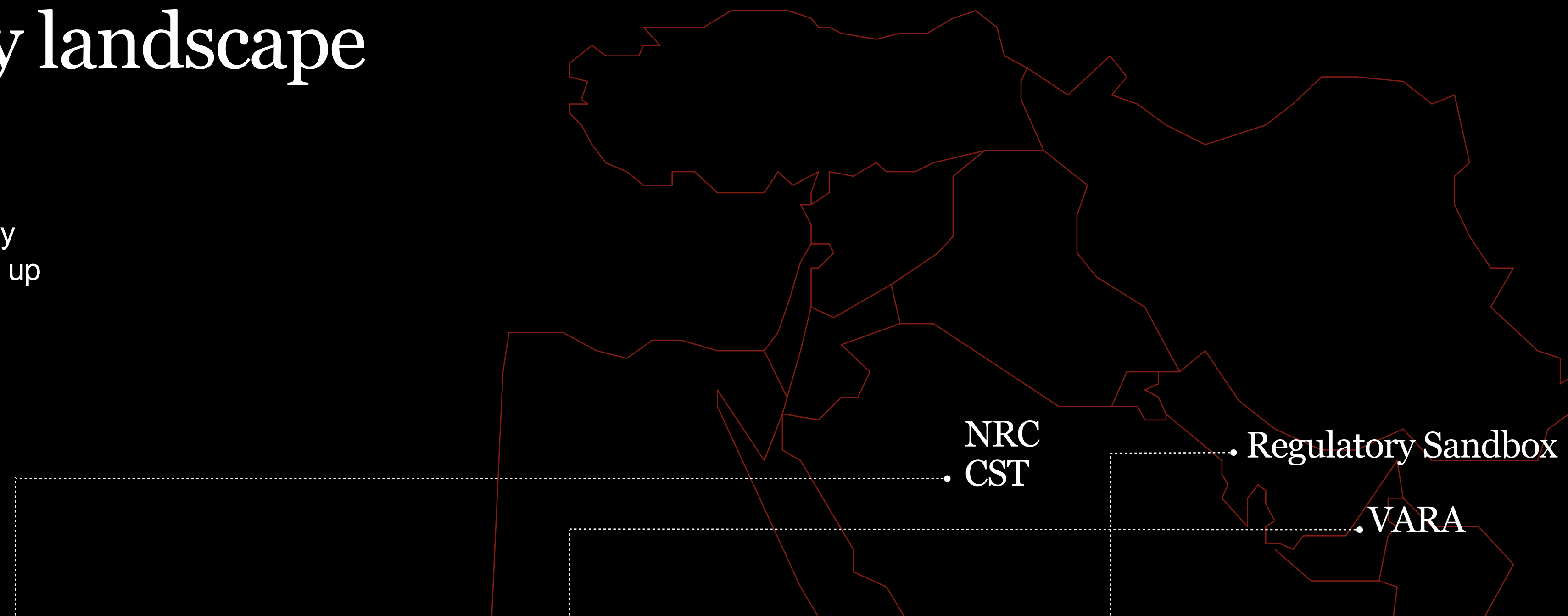
Saudi Arabia

KSA has concentrated efforts through its Communications, Space and Technology Commission (CST) to regulate digital content platforms [7].

The Saudi Central Bank (SAMA) launched a FinTech Lab in 2018, duly supported by the Capital Market Authority (CMA)[8].

CST also established the National Regulatory Committee for leading regulators to collaborate on ICT and digital cross-sectoral topics like Cloud, blockchain, smart cities and digital platforms, and proactively anticipate emerging topics.

UAE

The Dubai Virtual Assets Regulatory Authority was setup in 2022 to create an advanced legal framework to protect investors and design international standards for virtual asset industry governance[9].

Bahrain

The country established a Fintech regulatory sandbox as early as 2017 to undergo a digital transformation drive[10].

Regulatory framework

01 National level (digital nation)

National digital strategies	National digital policies	National digital programs

02 Industry/ Sector level

Priorities

Sector ❶	Sector ❷	Sector ❸	Sector ❹	Sector N-1	Sector N

Strategy   Policies   Regulations

Regulatory Bridge

03 ICT Sector (enabling Sector)

Tech supply and adoption	Infrastructure	Talent	Innovation and R&D
EmTech Policy	Policy 1	Policy 1	Policy 1
Policy x	Policy x	Policy x	Policy x

04 Cross cutting Sector

Cybersecurity
AI
Data
5G/ICT
Blockchain
Cloud
Robotics

Regulatory framework
Middle East

01 National level (digital nation)

A robust regulatory governance structure including entities, groups or committees at national level needs to define the directions of regulatory progress in the country that aligns well with the national digital strategies, policies and programs. Countries need to conduct a maturity assessment of current national digital policies, regulatory approaches in light of new advancement in technology and associated use cases such as drones, blockchain, AI etc. and accordingly design long-term plans and related actions to promote and enhance the digital regulatory ecosystem. In addition, continuous oversight mechanisms need to be designed to ensure adherence to laws, regulations, and standards and right adoption by the regulated entities.

02 Industry/ Sector level

At the industry level, sector regulators need to develop regulatory guidance and the related instruments in line with the national direction that supports businesses in the sector while ensuring regulatory compliance. This would also require sectoral entities to work with other sectors as well as the ICT sector ensure implementation of new age digital use cases in line with regulatory requirements. Sector regulatory has responsibility to define the breadth of entities and activities covered under the legislation, including precise definitions critical for legal clarity and enforcement.

03 ICT Sector (enabling Sector)

The ICT sector is an enabling force that supports digital transformation through right infrastructure, innovation/R&D while connecting supply and demand side players. ICT regulators need to aim for their regulations and associated tools to rapidly adapt to the needs of ICT providers, consumers, investors, and national development plans, while staying current with the swift changes in industry subsectors as well as adjacent industries.

04 Cross cutting Sector

These are new age sectors that are gaining prominence due to emergence of use cases that cuts across industries such as fintech, EdTech, healthtech, e-gaming, AdTech, e-commerce and more. For example, the e-commerce sector value chain covers multiple sectors such as trade and logistics, e-transactions, payments and many more and hence requires regulations that expands into adjacent industries to cover gaps if native regulations are not present, or governance is ineffective. National level regulators covering these technologies as well as ICT sectors need to strengthen collaboration for the advancement of cross cutting sectors and its new age use cases

Way forward
Modernising regulations

Given the rapid technological advancements and market developments, GCC regulators need to create a dynamic digital sector that aligns with their digital economy goals. This requires modernising regulatory tools and overhauling the regulatory ecosystem to support effective implementation and adoption of these changes.

The GSR-2023 in Egypt has provided some regulatory trajectories that can lead to modernised regulations.

Flexibility **VS** Predictability

Market players expect both flexibility and predictability – hence, regulatory processes will evolve at different paces.

Watchdog **VS** Ecosystem builder

Future digital regulators will serve as community builders and facilitators of inclusive digital opportunities for businesses and users, rebalancing their portfolios and fulfilling several roles simultaneously.

National **VS** Global frameworks

Governments need robust legal frameworks, both national and international, to navigate digital transformation. A global framework may be essential to address issues like global digital platforms, digital currencies, privacy, ethics, transparency, and taxation.
New international and regional treaties will need to set boundaries, redefine rules, and adapt to digital markets.

Decentralised regulatory models

These thrive in the digital environment, aligning closely with market players, tailoring to their business models and goals.

Way forward
Revamping the regulatory ecosystem

"Whole of the Government" approach

This has a top-down view of cross-jurisdictions and can support regulation digital technologies that calls for increased dialogue and coherence among government entities.

Adaptive structure to digital regulation

Extend mandate of policy and regulation makers either by extending the roles of existing regulators or merge different regulators in addition to providing them with adequate resources and power to execute its mandate

Regulators needs to develop agile policy structure that covers the needs of new business models and ways of working through shared & gig economy

Connect supply and demand side players

Create a national level body to coordinate between ICT, traditional sectors and cross cutting regulators such as cyber, data and AI to ensure regulations are built to cover challenges of new age business models and services.

Active participation from the ecosystem

Governments need more than ever to actively engage a broad and diverse range of stakeholders – private businesses, technology experts, academia, public consultation/debate to collectively address the challenges of digitalisation and find solutions.

Data value creation and privacy focus

Declare data as a national asset, build a national data management framework and support initiatives focused on data value creation.

Build policies aligned to national as well as international regulatory guidelines such as personal data protection, Intellectual property rights, open data and corresponding privacy and security needs including cyber.

Foster global cooperation

International regulatory cooperation is needed to avoid arbitrage; protect consumer rights effectively; and promote interoperability across regulatory frameworks and enforcement, whilst creating a favourable environment for the digital economy to thrive.

By adopting a proactive, agile approach, regulators can effectively manage digital transformation, drive economic growth, and ensure that the benefits of technological advancements are widely accessible and equitably distributed. Immediate, coordinated action from governments, regulators, and industry stakeholders is essential to build a regulatory ecosystem that supports innovation and protects consumer rights.
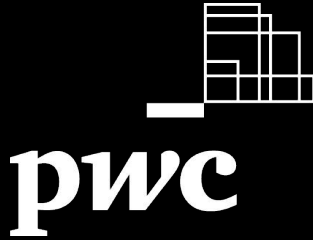
References

[1] https://www.itu.int/itu-d/meetings/gsr-23/wp-content/uploads/sites/20/2023/07/GSR23_Chairman-Report_Final_English.pdf

[2] https://www.cisc.gov.au/legislation-regulation-and-compliance/soci-act-2018

[3] https://www.austrade.gov.au/news/insights/insight-australia-s-a-7-billion-cyber-security-opportunity

[4] https://www.pwc.co.uk/economic-services/documents/future-of-digital-policy-and-regulation.pdf

[5] https://www.pwc.com/m1/en/publications/documents/the-digital-services-acts-package.pdf

[6] https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence

[7] https://www.arabnews.com/node/2056826

[8] https://cma.org.sa/en/Market/fintech/Pages/default.aspx

[9] https://rulebooks.vara.ae/rulebook/introduction-2

[10] https://www.fitchsolutions.com/telecommunications/bahrain-fintech-mature-flexible-regulatory-environment-underpins-innovation-08-09-2022

Contacts

Fadi Komati

fadi.komati@pwc.com

Senior Partner, Technology Consulting, PwC Middle East

Joseph Abboud

joseph.abboud@pwc.com

Partner, Technology Consulting PwC Middle East

Amit Bisht

amit.bisht@pwc.com

Director, Digital Government and Regulations, PwC Middle East

About PwC

At PwC, our purpose is to build trust in society and solve important problems. We're a network of firms in 151 countries with nearly 364,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at www.pwc.com. Established in the Middle East for over 40 years, PwC Middle East has 30 offices across 12 countries in the region with around 11,000 people. (www.pwc.com/me).
PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.