



هيئة الحكومة الرقمية
Digital Government Authority

RegTech

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General Context

Introduction

The development of modern and emerging technologies has paved the way for the technology usage in controlling and regulating legislations and regulations. Supervisory authorities and regulators legislations and bylaws tend to utilize those technologies to ensure digital compliance with those regulations and legislations. Regulators and legislative authorities face significant challenges that allow them leveraging modern technologies such as artificial intelligence, IoT and blockchain as control tools that act as main pillars for the digital transformation journey that is rapidly evolving. Such agencies have an opportunity to increase efficiency and quality of work, secure new policies and regulations, while ensuring public and private sectors' compliance and monitoring their commitment.

■ Current State

Governments and regulators play a key role in promoting digital innovation in a digital-based world through developing the policies that both government and private sectors should pursue.

■ Challenge

One of the most significant challenges facing government agencies is in lacking the capability to leverage emerging technologies and controls in tracking compliance with regulatory frameworks, thus facing the challenge to ensure efficient compliance with new policies and regulations.

■ Objective

This study aims to highlight the role of regulatory techniques in ensuring compliance with regulatory frameworks and legislation that will assist government agencies in performing their regulatory functions.



Reg-Tech Related Considerations

- **Compliance:** Real time monitoring and tracking of current state of compliance and upcoming regulations
- **Measurement & Reporting**
- **Risk Management**
- **Financial Cost**
- **System Controls**

What is RegTech?

RegTech, or Regulatory Technology, is a category of technological solutions that are aimed at supporting regulatory compliance in its related domains. RegTech have proven positive impact in this domain.

RegTech is defined as new, diversified and sophisticated digital solutions based on sophisticated technologies such as, but not limited to, artificial intelligence, big data, cloud computing and machine learning. Those technologies help regulators as well as regulated agencies to access regulatory compliance by automating compliance and control procedures. RegTech contributes to reducing risks and errors that may occur as a result of manual procedures.

RegTech solutions facilitate and monitor regulatory change and ensure that policies and controls adapt flexibly to necessary change requirements. RegTech plays a role at the government level in reducing the cost of compliance, increasing the efficiency of regulatory processes and improving the regulatory environment.

Evolution of RegTech

Emerging regulatory technologies were initially applied to FinTech in the wake of rapid development of the financial sector :

FinTech



Regulatory Technologies

Then, "RegTech" has evolved into a general phenomenon that has proliferated into other sectors, most important of which are the following :

RegTech



Transportation

Healthcare

Energy

Retail

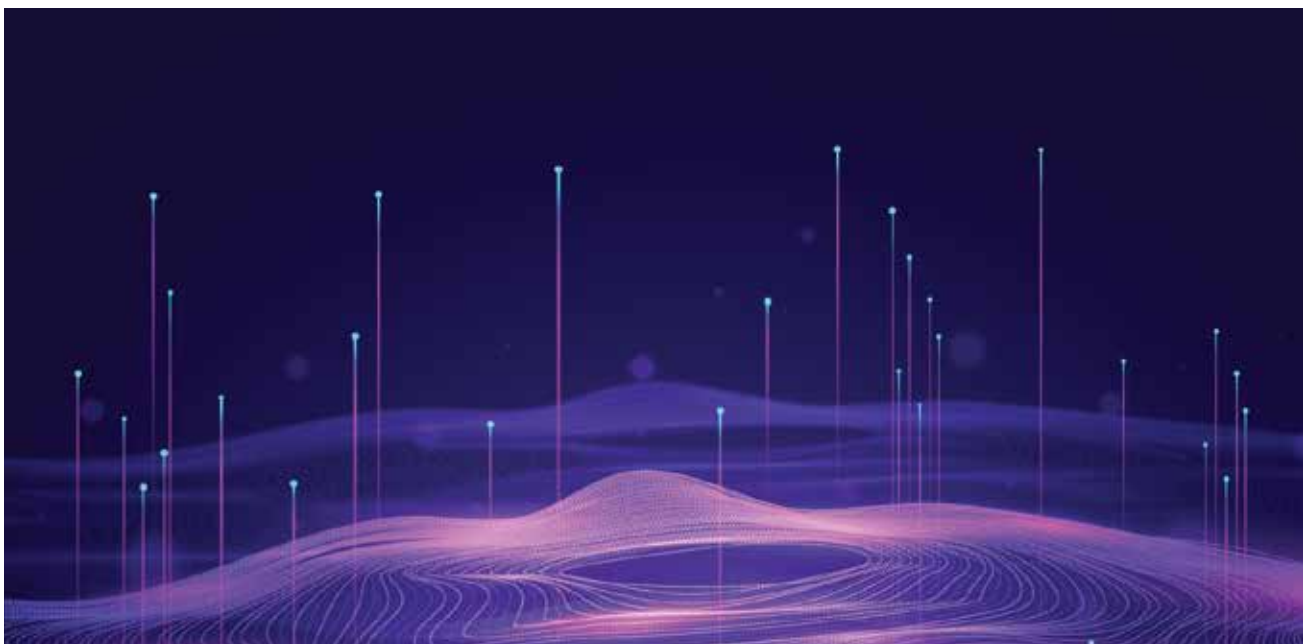
Tourism



Global RegTech spend is at
68\$ billion as of 2022

Global RegTech spending is
estimated to increase to **\$204
billion** by 2026

RegTech is estimated to make
up **%50** of global regulatory
compliance budgets by 2026



Regulatory Compliance Maturity & Benefits of RegTech

Historically, there have been other mechanisms that were used to support the compliance of regulations. Some of these techniques are still used, but vary depending on the digital maturity level of the agency.



Foundation

Study basic compliance requirements and regulations, including standard physical checks and basic methodologies used to assess the initial compliance structure and address its deficiencies.



Sustainability

Emphasize comprehensiveness of regulatory rules among all control and regulatory sectors, in order to ensure sustainability and transparency in the use of basic techniques and data, with a view to updating compliance policies, as well as developing key performance indicators for monitoring and reporting.



Value Creation

Gain and drive efficiency, find overlaps, and eradicate redundancies with the use of emerging regulatory technologies and predictive analytics. Automate and optimize oversight and execution processes for streamlined compliance efforts.

Key Benefits of RegTech

■ Agility

Leverage data to facilitate follow-up procedures for compliance with laws and regulations

■ Integration

Link relevant government communication platforms and channels that help operationalize regulatory technologies

■ Efficiency

Achieve the highest level of commitment of the relevant authorities to regulations and legislation

■ Speed

Configure and generate reports promptly

■ Analytics

Intelligently mine existing “big data” data sets and unlock their true potential

■ Risk limitation

Reduce human intervention by automating compliance procedures

RegTech Global Practices

Countries included in the research

The study included an analysis of a number of international RegTech practices on the government sector to assess the application of such technologies and measure the operational impact. To present such practices more clearly, it may be passed on the following three basic stages of the regulatory landscape: (1) Regulatory Requirements, (2) Testing and Quality, (3) Compliance Reporting.



Global Practices (1/3)

Regulatory
Requirements

Testing and
Quality

Compliance
Reporting



Canada

Launchpad Hub

Challenge

Ontario Securities Commission (OSC) found that the current state of financial technology companies don't fit neatly into current regulations and acknowledged that some requirements might not make sense for the new business models. This triggered the need raise the awareness of the current regulations requirements and work with the fintech companies to co-define tailored regulation requirements that fit their unique business models.

Action Taken

The OSC is launching a hub called LaunchPad to work directly with companies to help them with application of the regulatory framework. The OSC will apply what it learns to developing its registration and compliance model. This action was taken with the expectations that this could be woven into overall initiative by Canada's market regulators to simplify and lessen the regulatory burden on all registered companies.

Global Practices (2/3)

Regulatory
Requirements

Testing and
Quality

Compliance
Reporting



Australia

Regulatory Sandbox

Challenge

Building on their experience through their Innovation Hub, the Australian Securities & Investments Commission (ASIC) has identified some barriers faced by new financial technology (fintech) businesses seeking to enter the financial services market. These barriers include speed to market and meeting the organizational competence requirements of a licensee.

Action Taken

ASIC released a consultation paper on proposed further measures to facilitate innovation in financial services, including a regulatory sandbox licensing exemption. In seeking to address these specific barriers to innovation in financial services, ASIC is proposing to modify ASIC's policy on organizational competence of a licensee to allow some heavily automated businesses to rely on compliance sign-off from a professional third party to meet their competence requirements; allowing start-ups to test certain their services through the regulatory sandbox.



UAE

Innovation Testing Sandbox to test innovative products and services

Challenge

As innovative products, services, and business models are developed, regulatory uncertainties arise along with emerging technologies and trends, which make it difficult for regulators to meet supervisory expectations.

Action Taken

The Dubai Financial Services Authority (DFSA) invites local and international firms to apply to join the next cohort for its Innovation Testing Licence (ITL) Program. The ITL is a licensed regulatory sandbox which enables approved firms to test new and innovative financial products, services, and business models in and from the Dubai International Financial Centre (DIFC) within a restricted regulatory environment. The program reflects the DFSA's continued commitment to new and emerging technologies in the DIFC, while ensuring compliance with clear oversight provided by the sandbox.

Global Practices (3/3)

Regulatory
Requirements

Testing and
Quality

Compliance
Reporting



UK

Digital Regulatory Reporting

Challenge

Since the financial crisis, the regulatory rulebooks have been affected. The complexity and cost of regulatory reporting has grown alongside this. Many FCA-regulated firms have communicated that regulatory reporting has become overly complex, time consuming and costly. As indicated by the European Commission, most firms' regulatory reporting costs are around %1 of their operating costs. The total estimated costs for UK banks are £2bn – £4.5bn a year.

Action Taken

The Financial Conduct Authority (FCA) and Bank of England (the Bank) established the Digital Regulatory Reporting (DRR) project. The project aims to find a formula through which the firms and regulators could use technology to make the current reporting process could be automated in away that makes regulatory reporting more accurate, efficient and consistent. showcased how to automate the reporting process by making changes in the following areas:

- Standardizing the description and identification of data
- Digitizing reporting instructions and generation



RegTech Categories

RegTech can fall under (5) main categories, one of which is directly related to Regulatory Reporting Tools:

01

Regulatory Reporting Tools

Definition :

Tools for leveraging the potentials and analysis of large data and cloud computing in enabling automation of distributed data and control reports.

02

Risk Management Tools

Definition :

Tools to detect compliance and regulatory risks, assess risk exposure and anticipate future threats.

03

Identity Management & Control

Definition :

These tools reveal the customer's identity through Know Your Customer (KYC) procedures, as well as automated Learning and anti-fraud operations.

04

Compliance Tools

Definition :

These tools monitor the current status of compliance and track the application of future regulations.

05

Transaction Monitoring Tools

Definition :

Solutions for real time transaction monitoring and auditing through leveraging the benefits of Blockchain technology and cryptocurrency.

RegTech in Saudi Arabia

It is important to highlight the authorities responsible for regulation that have benefited, and can benefit from using RegTech technologies to automate and optimize their compliance and monitoring processes.

01 Financial Regulators

- ▶ The financial sector in Saudi Arabia is governed by the Saudi Central Bank and the Capital Market authority, each with a set of financial services under their jurisdiction.
- ▶ Notably, The Saudi Central Bank has received the Global Impact Award 2021, which was granted by the Central Banking Committee as part of its Central Banking FinTech & RegTech Global Awards for its exploration of the viability of a single dual-issued digital currency between nations through Blockchain. This project highlighted regulatory knowledge related to adopting emerging ledger technologies in the financial field.



02 Tech-related Regulators

- ▶ The technology sector in Saudi Arabia involves several actors responsible for different RegTech issues, including, but not limited to, CST regulating the technology sector and communication service providers. Recently, space organization functions have been assigned to the CST, while the tasks of regulating cybersecurity in the Kingdom were assigned to NCA. Also, DGA has been established to organize the work of the digital government and the digital transformation agenda to act as a regulator and enabler.
- ▶ Such authorities are likely to be using regulatory technologies such as AI, automation, and Big Data analytics, but would also greatly benefit from a RegTech tool that provides a repository of all their specific needs.



03

Market Regulators

- ▶ Market regulators can be, by way of example, seen through Monasha'at (SMEs General Authority), with the regulation of the entrepreneurial ecosystem, Ministry of Commerce, with e-commerce and commercial activities regulation, and Ministry of Investment, with regulation support for establishing a company in the KSA.
- ▶ Real time information sharing can help make better decisions for market regulators, especially in the case of the Ministry of Commerce with constant activities that need supervision on a continuous basis. This also enables regulators to intervene quickly and protect stakeholders from exploitation.

وزارة التجارة
Ministry of Commerce



وزارة الاستثمار
Ministry of Investment



Opportunities for Government Agencies from RegTech

As regulatory agencies in the kingdom begin to invest in such technologies and RegTech tools, they will reap some benefits that would support their journey into such adoption of decisions to be invested.



Creating Partnerships

Partnering with a third-party vendor that delivers RegTech solutions that are appropriate to the nature of the application of these technologies by relevant authorities is considered to be the vendor's ability to provide a supporting team that delivers any assistance it requires when using the tool, rather than using separate organizational techniques and implementing them on their own.



Lessening Regulatory Burden

RegTech tools could empower agencies, such as DGA, to lessen regulatory burdens on the regulated stakeholders, if the tools selected can be used both internally and externally to have efficient and immediate communication with ministries in the Kingdom, creating transparency for all.



Optimizing Regulatory Processes

The Kingdom's Vision 2030 promotes digital transformation in the Kingdom, and this can be assisted by raising digital maturity of the government agencies and adopting RegTech tools. This objective can be achieved by using technology platforms that allow regulators to streamline process efficiency. By automating workflows, regulators can reduce the cost and complexity of regulatory reporting and compliance. The application of regulatory techniques will therefore be positively reflected on both regulators and regulated agencies.



Building Proactive Mechanisms

RegTech tools allow the empowerment of agencies and authorities, such as the DGA, to alleviate the regulatory burden placed on stakeholders requiring regulation. This requires that tools can be used both internally and externally to maintain immediate and effective communication with others in Saudi Arabia and thereby ensure transparency for all.





Results and Recommendations

After reviewing global practices and benchmarking RegTech tools in Saudi Arabia. The results and recommendations can be summarized as follows:

- 01 Proliferation of RegTech**

RegTech is an emerging field focused on the use of technical surveillance to enable compliance with regulations that is being applied to government agencies along with other major sectors, such as healthcare, retail, finance, etc.
- 02 Techniques for Compliance with Regulations**

Globally, governments use different techniques to monitor and ensure compliance with regulatory policies, whether through RegTech application, publication of compliance reports, sandboxes or assistance toolkits.
- 03 Regulation of Compliance Procedures**

RegTech tools use a wide variety of technologies that allow different sectors to appropriately monitor, directly connect with, and notify public and private sector players to surveil regulatory compliance.
- 04 RegTech in Saudi Arabia**

In Saudi Arabia, there are many government agencies that can benefit from RegTech solutions, and can yield tangible benefits, if the right approach is taken to identify and select the right tool for their needs.
- 05 Regulatory Sandboxes**

A safe environment to experiment, and test new technologies without having to experience the strict rules and regulations of the real world. The sandbox opens the doors to for developers of ideas and projects to test and expose their ideas to certain situations to ensure that they are mature and ready for future live application in Saudi Arabia.

Table of Definitions

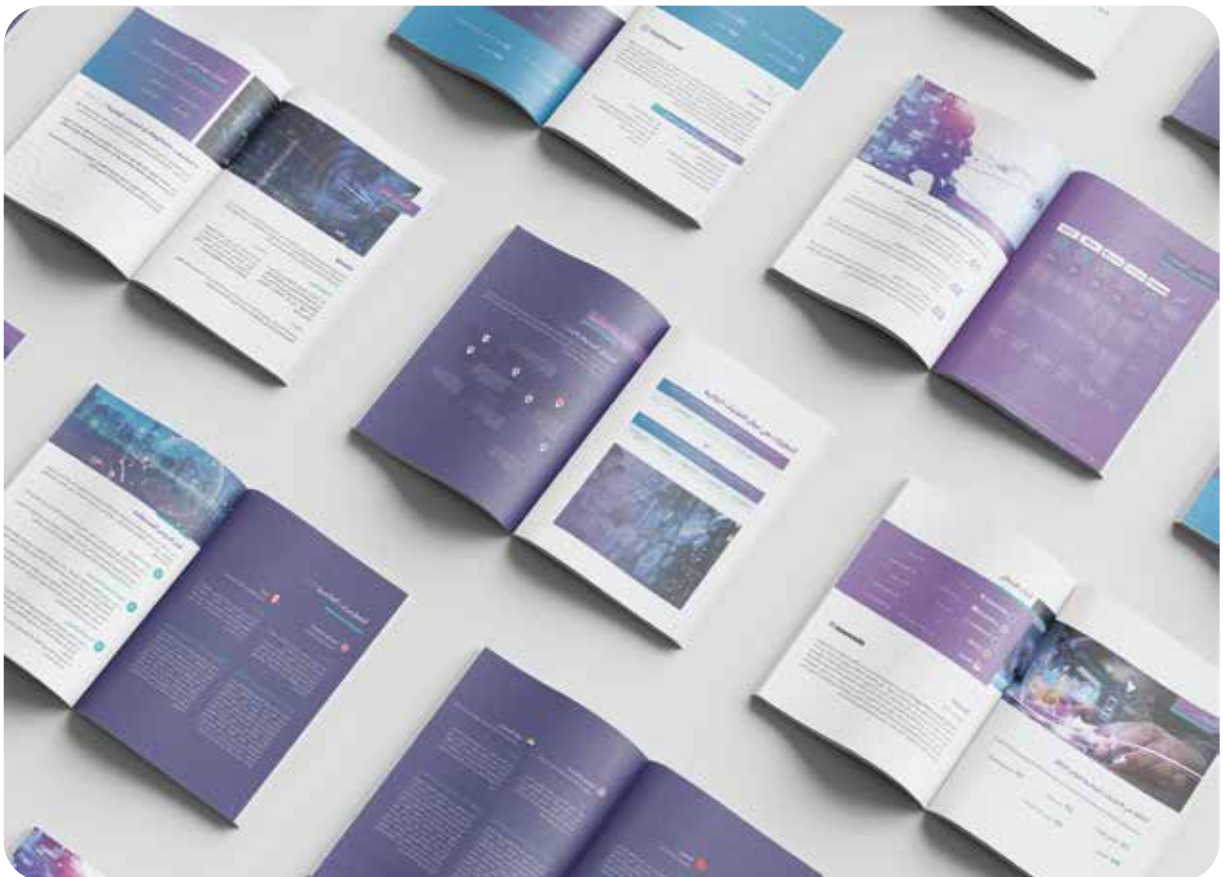
Term	Definition
Digital Maturity	Digital maturity is the ability to respond quickly to and benefit from market opportunities based on existing technology packages as well as physical, human and digital resources. Digital maturity represents the organization's ability to deal with digital transformation not only from a digital technology perspective, but at an organizational level, including individuals, culture and processes, in order to achieve business results.
Sandbox	A sandbox is an isolated testing environment that enables users to run programs or open files without affecting the organization's applications or systems. The concept of a sandbox isolates and protects the organization's critical infrastructure from suspicious software as it operates under an isolated system and allows IT management to evaluate and test suspicious software to understand how it works as well as detect similar malware attacks more quickly.
Identity Management & Control	Identity management and access control is the discipline of managing access to enterprise resources to keep systems and data secure.
Regulatory Reports	Reports including data shared with the competent authorities in order to demonstrate compliance with the necessary regulatory provisions.
Cloud Computing	The practice of using a network of remote servers hosted on the internet to store, manage, and process data, rather than a local server or a personal computer.
Transaction Monitoring	Transaction Monitoring refers to monitoring and control of customer transactions, including assessment of customers' historical/current information and interactions to provide a full image of customer activity. This can include transfers, deposits and withdrawals. Most financial agencies use software to automatically analyze data.
Smart Contracts	Smart contracts are simply programs stored on a blockchain that run when predetermined conditions are met. They typically are used to automate the execution of an agreement so that all participants can be immediately certain of the outcome, without any intermediary's involvement or time loss.
Information Asset Register (IAR)	An Information Asset Register (IAR) is a catalogue of the information an organization holds and processes, where it is stored, how it moves and who has access.

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