

Technology Trends in a Digital Tax Ecosystem

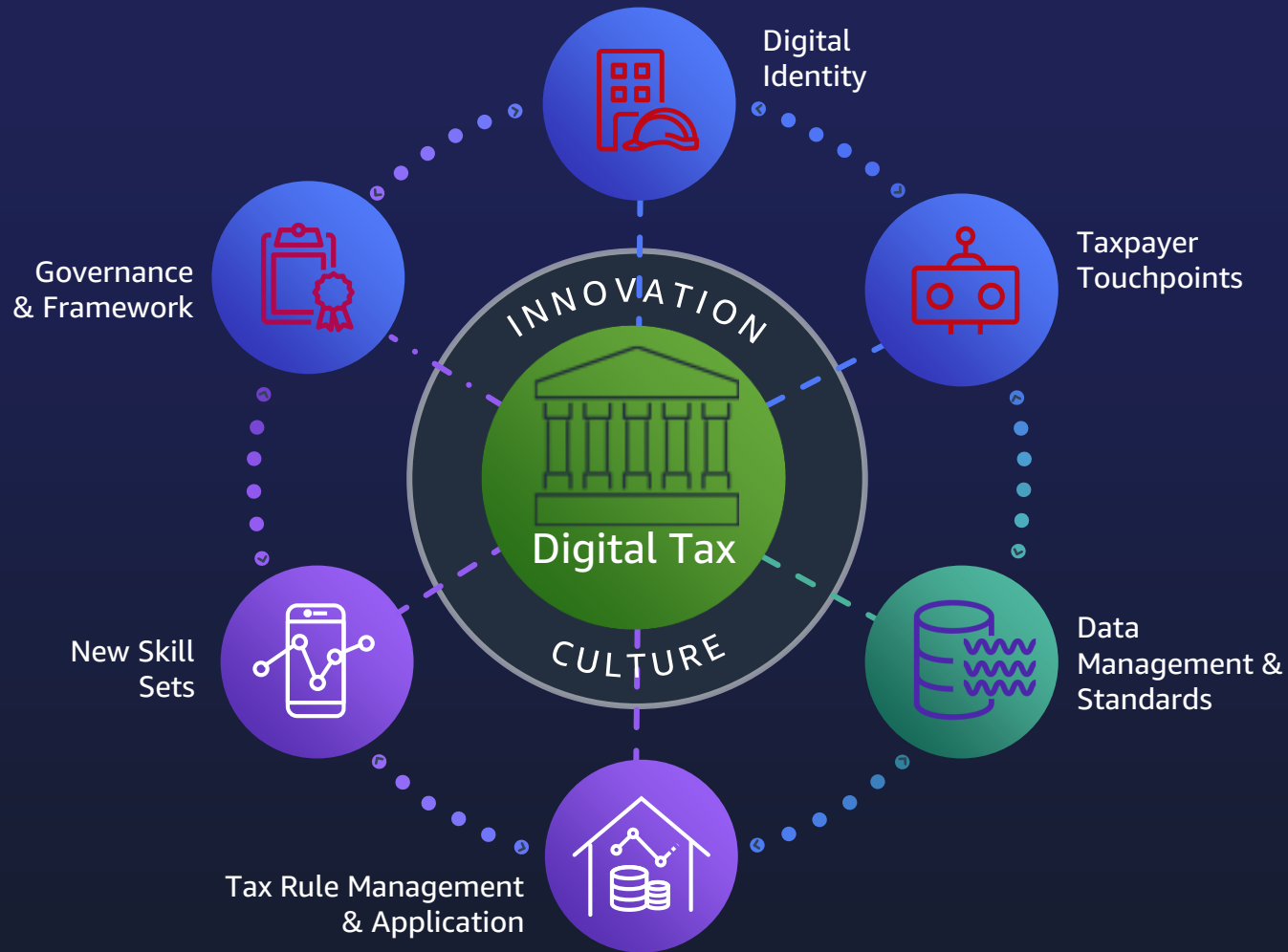
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Amazon Web Services (AWS)



Digital Tax Transformation Journey – Where are you going?



Whole of Society Digital Identity

Touchpoints into taxpayers' natural systems

Pull vs push data access; remote audit using AI

Tax Law - Rules as Code Approach

Future skills for taxation processes

Strategic Workforce Planning

OECD Digital Transformation Maturity Model: <https://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/digital-transformation-maturity-model.htm#:~:text=The%20OECD%20Tax%20Administration%20Maturity,across%20five%20discrete%20maturity%20levels.>



Overview

Executive Order for
Customer Experience
issued

December 13th 2021

The Executive Branch has made customer experience a priority, to better serve:

Disaster survivors

Single parents

Immigrants

Small business owners

Veterans

Citizens and businesses

Common Challenges – Tax & Revenue Authorities



High call volumes and insufficient staff during peak tax season



Lack of customer access to digital tools



Delayed processing and late payment penalties



Lack of automation tools to expedite workflows and document processing



Expensive to scale services with on-premises infrastructure



Lack of advanced analytics and AI/ML capabilities

Tax Authorities want more value from their data



Growing
Exponentially



From new
sources



Increasingly
diverse



Used by
many people



Analyzed by many
applications

A data-driven organization means...

Data is an organizational asset

No longer kept in silos or as the property of individual departments

Data is accessible

Available easily and securely to anyone who needs access to it

Data is put to work

Used in analytics and ML to make better decisions, create efficiencies, and drive new innovations

FINRA built an AWS data lake to enable markets surveillance at scale



“ We got some huge pleasant surprises out of [going all in on AWS] that we weren’t expecting at all. First of those is amazing performance improvements. On average, 400 times improvement to interactive queries. The investigative capacity to our surveillance team has expanded dramatically ”

Steve Randich
CIO, FINRA

► OVERVIEW

FINRA needed a platform that could ingest, process, and store 80 billion market events on an average day and dynamically scale up to handle 240 billion events on a peak day.

► SOLUTION

FINRA built a data lake on AWS using [Amazon S3](#) and [Amazon EMR](#) to store and analyze data from 3,000 broker dealers and 22 exchanges.

► IMPACT

FINRA’s flexible platform can adapt to changing market dynamics while providing analysts with the tools needed to query the data set.



HMRC expands service delivery in response to COVID



“ As the COVID-19 pandemic affected the United Kingdom, Her Majesty’s Revenue and Customs (HMRC) delivered a nationwide scalable digital solution in just 4 weeks, paying out more than £69.3 billion and supporting the income of more than 11.7 million jobs.

”

► OVERVIEW

In late 2019, the COVID-19 pandemic forced the British government to face a critical challenge on a national scale: how to develop and deliver programs to support citizens who were facing possible financial hardships.

► SOLUTION

HMRC expanded its AWS-hosted core applications using containers and automated scaling, including implementing HMRC’s Docker container platform on AWS. HMRC also expanded its use of microservices to demonstrate a future model for rapidly building secure applications on Cloud.

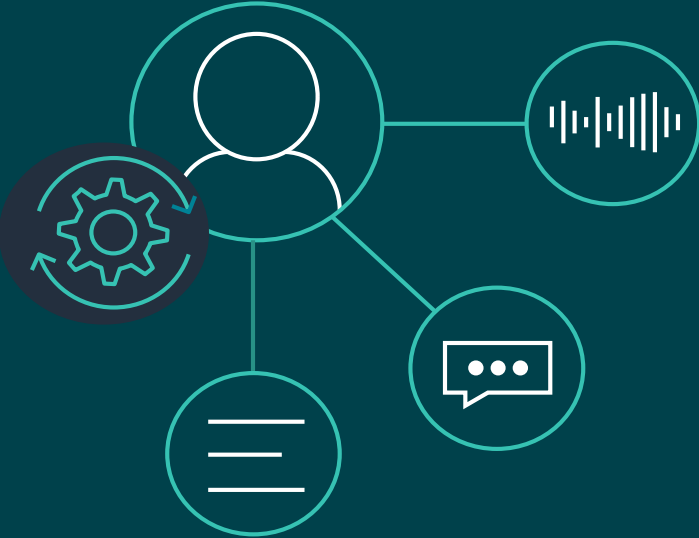
► IMPACT

In just 4 weeks, HMRC and its IT partners delivered a nationwide scalable digital solution called the Coronavirus Job Retention Scheme (CJRS), paying out more than £69.3 billion, supporting the income of more than 11.7 million jobs and achieving a customer satisfaction score of more than 90 percent.



Digitalisation of Tax Affairs: Automation, Speed & Analytics

Easily automate, track, and manage tasks



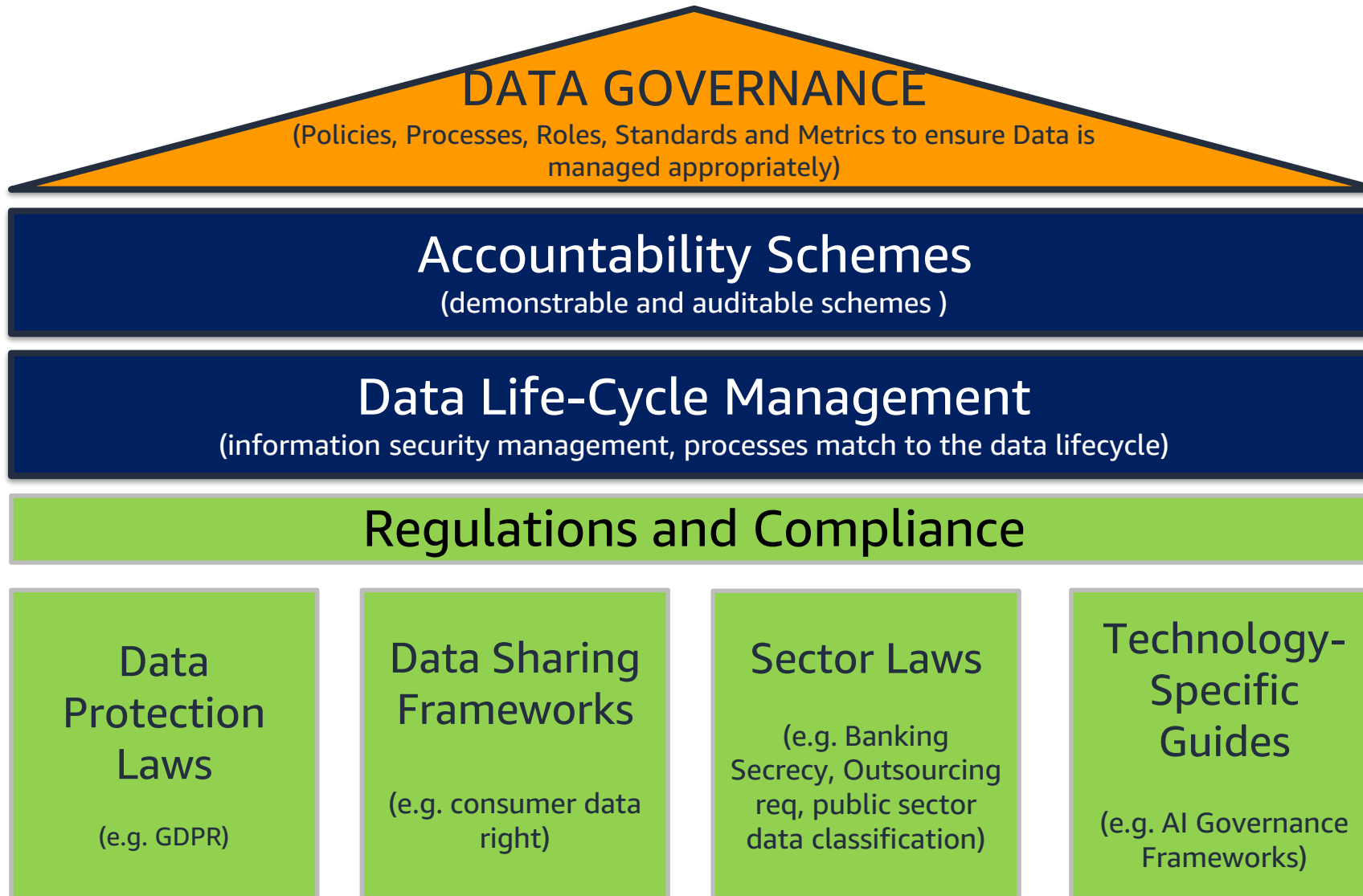
Leverage Intelligent Document Processing



Detect and prevent fraud



Role of Governance



Machine consumable legislation & regulation

“Transformation isn’t doing
the same things better. It’s **doing new
things** and **doing them differently.**”

Questions ?

Thank You!

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