DIGITALISATION OF TAX: INTERNATIONAL PERSPECTIVES

ICAEW THOUGHT LEADERSHIP

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This research includes a case study on Russia, which was conducted before the Russian invasion of Ukraine in February 2022. Fiscal and business conditions within Russia and between Russia and some of its international trading partners may have changed.

ICAEW strongly condemns the Russian government for its actions and supports the economic sanctions implemented by the UK, EU and US. We are confident that ICAEW Chartered Accountants, whether in practice or in business, will be ready and willing to play the fullest possible role in making these measures effective, and in helping companies across the economy cope with the disruption they will bring.

We are monitoring the situation closely and regularly updating our website with the latest advice, practical information and insights to help members handle the crisis.

INTRODUCTION

Since the advent of modern computing, the processes of filing tax returns, doing computations and paying taxes has been steadily transformed. From the earliest pre-population of tax returns in Denmark in the 1980s, through the growth of PDF-format tax forms in the 1990s and 2000s, and the increasingly central place of online filing in the 2010s, tax authorities around the world have continually looked to innovate and expand their use of technology.

Today, digitalisation is transforming how tax is reported and paid. Whether it be digitally advanced governments looking to expand the scope and automation of their interconnected tax systems, or less-developed authorities looking to go digital to weather the COVID-19 pandemic, significant innovation and investment is occurring in countries of all kinds. Collecting the right revenue efficiently will be necessary to fund the challenges of today and of the future, from climate change to inequality.

In this report, we focus on how digital methods are transforming the tax compliance landscape, rather than how the digitalisation of the wider economy and the change to business models are affecting tax – although we do consider the impact of these changes. As we will see, digitalisation can cover a wide range of activities.

Across two previous editions of this report, ICAEW has built up a methodology for reviewing a wide range of countries. The case studies distil key lessons that can inform stakeholders in the tax system – whether they are policymakers planning their own countries' transformation, tax advisers looking to support their clients, or taxpayers trying to predict how their own situation will evolve. In this third edition, we update several previous case studies and review three new countries (Japan, Kenya and New Zealand), examining further ways in which the evolving frontier of technology is changing tax.

These case studies show not only how certain issues are common across all digitalisation projects, but also how the unique circumstances and approaches of each jurisdiction have shaped their digital development. They are built on interviews with ICAEW members, their contacts and local tax authorities, all of whom were generous in giving their time to support this project. Comparing and contrasting these case studies is the basis from which we have drawn our conclusions.

Innovation in how to best collect tax information and tax receipts is rapid and common. Tolley's April 2021 *The Tax Technology Horizon* report suggests that, while companies are happy to automate and save costs on their tax compliance, the impetus for most digitalisation comes from national tax authorities and their evolving requirements, rather than organically from within the taxpayer ecosystem. These often ambitious change programmes can aim to speed up the tax cycle, close tax gaps through reduction of error, better identify potential tax evasion, support digitalisation of the wider economy, collect real-time economic data and more.

Wherever you, and wherever your country, are in the journey of bringing tax administration into the digital future, we hope you find this report enlightening and useful in preparing for it.

KEY LESSONS

TAX CAN BE A DRIVER OF WIDER DIGITALISATION WITHOUT BEING A BURDEN

Requirements to file tax in a digital format, or issue invoices electronically, can increase the efficiency of the tax system, while also providing impetus for economic growth. Embedding tax into the systems that taxpayers naturally use, such as accounting software, can make the change easy and invisible.

TAX AUTHORITIES ARE BECOMING INCREASINGLY CENTRAL TO GOVERNMENT OPERATIONS

Many countries leant on their tax authorities – as their most interconnected and digitally enabled department – to administer COVID-19 emergency support schemes, and the duties of tax authorities continue to be reinvented.

DIGITAL IDENTITY AND DIGITAL EXCLUSION ARE PRESSING ISSUES

Possession of a robust, interoperable and secure digital identity is becoming increasingly necessary, not only for paying taxes, but for participating in society. Being excluded from the digital revolution – whether because of a lack of computer skills, insufficient resources, or any other reason – can leave people lagging behind.

THERE IS NO SINGLE PATHWAY TO DIGITALISATION

Whether it's Brazil's focus on electronic invoices, Estonia's long-term digital commitment, Kenya's connection with mobile money, or any of the other processes reviewed in our case studies, we have seen digitalisation succeed and fail in a variety of ways. No two countries' journeys are exactly alike, but there's something to be learned from all of them.

DIGITALISATION TRENDS

There are many drivers for digitalisation. Data is being produced in ever-increasing amounts and is cheaper and easier to store with each passing year. The scope of data that can be collected is also expanding, thanks to innovations such as the Internet of Things. The way we work and trade has become more complex and varied, from international online marketplaces to the gig economy, with tax authorities having to modernise to keep up.

In this section we will explore some of the wide array of approaches that countries have taken to digitalise their tax processes. We will examine how each can support improvement in the ease, speed and accuracy of filing and paying taxes. While listed separately here, in real life these different options all interact, creating a complex interlocking system that is unique to each country.

WHAT DO WE MEAN BY DIGITALISATION?

In this report we use digitalisation to mean a complete reimagination of tax processes using digital methods, as opposed to simple digitisation, which only extends to making digital equivalents of analogue records and forms.

The Organisation for Economic Co-operation and Development's (OECD's) 2020 report *Tax Administration 3.0: The Digital Transformation of Tax Administration* describes the difference as being like a version number for tax administration.

- Tax administration 1.0, being traditional paper forms completed manually and filed by post or in person.
- Tax administration 2.0, being digitised electronic versions of 1.0 forms and procedures, such as PDF or online tax forms, hosted on tax authority websites.
- Tax administration 3.0, being the currently emerging wave of digital-first and automated tax processes that are embedded in the same systems that taxpayers use to carry out their taxable business in the first place.

It's important to note that this model is oversimplified. Not all countries proceed through these stages, and some that are starting modernisation more recently are skipping some steps. Even within a country, taxes and other areas can be at different stages of digitalisation. The progression is not tied to the size of the economy in question – many smaller, less-developed countries have been able to overtake their larger peers.

PRE-POPULATION

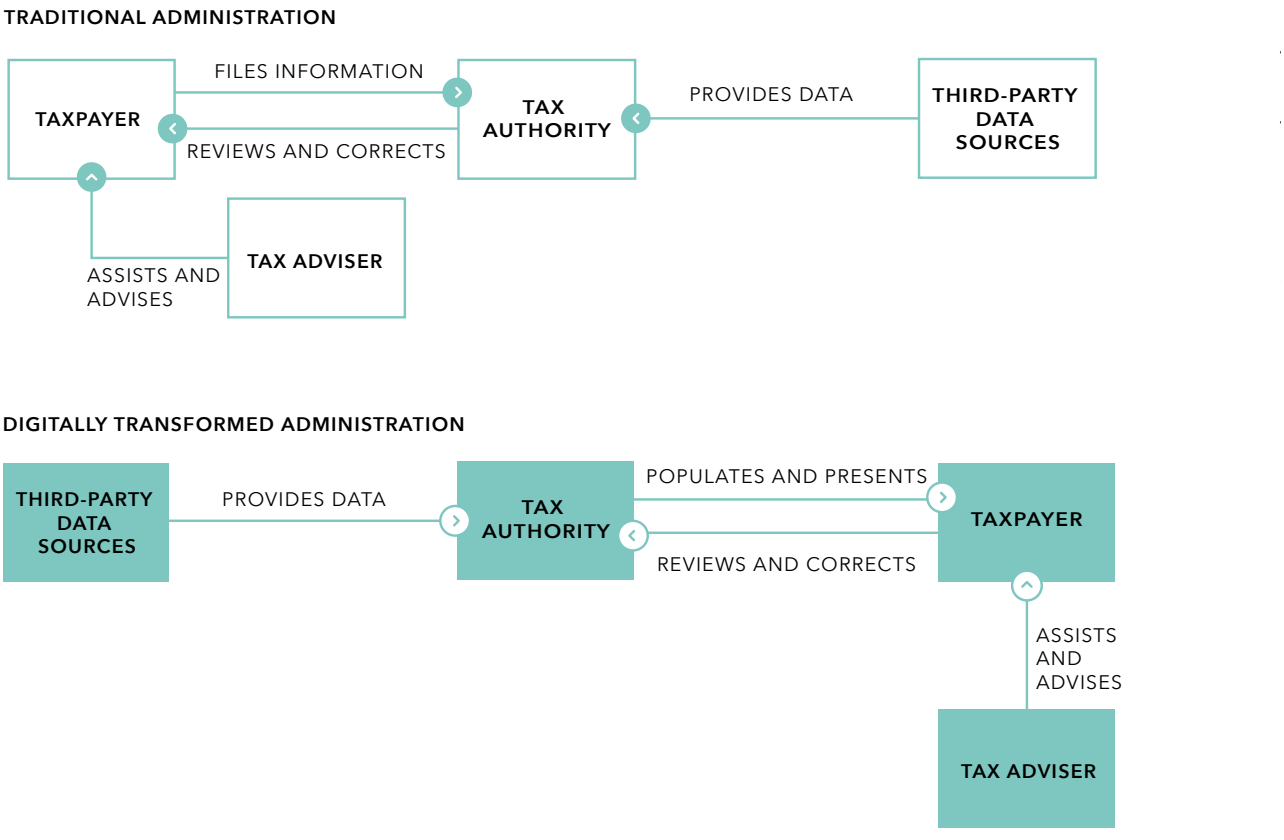
The oldest and most enduring feature of digitalisation is that of pre-populated returns. The concept is simple enough: where the tax authority already has information on a taxpayer from other sources, it can pre-fill the return with these figures rather than asking the taxpayer to re-supply them. This reduces errors and simplifies the returns process.

Sources of data can include employers, banks, unions, and other government departments. For pre-population to work, data connections from these third parties must be high quality, close to real time and reliable. A consistent way of identifying the taxpayer across all these interactions is also essential, usually building on a high-quality national identity system where this is in place.

Pre-population can potentially benefit all participants in the tax ecosystem significantly, although so far it has been much more commonly applied for taxes on individuals than for those on corporations. However, because of the substantial prerequisites for it to work smoothly and correctly, it requires tax authorities to be highly organised and digitally focused.

Pre-population is more than just a convenient helping hand. It fundamentally reshapes the tripartite relationship between the taxpayer, tax adviser and tax authority.

There is a change in the flow of information, with the roles of preparer and reviewer reversed. The tax adviser's responsibilities shift towards reassuring their clients more than representing them.



ELECTRONIC INVOICING

Many countries have pursued digitalisation by mandating electronic invoices, sometimes for business-to-government (B2G) or business-to-business (B2B) transactions only, and sometimes for all sales. This typically consists of a set of standardised formats and a system for remitting invoices that passes a copy to the tax authority. It offers greater visibility of economic and taxable activity in real time.

These systems can only fully leverage the advantages if they are completely mandatory, which can be challenging. Invoicing templates need to cover every conceivable element to be effective. Smaller companies often find the costs and complexities of adopting these systems detrimental.

CASE STUDY EXAMPLE: BRAZIL

To combat high levels of unreported economic activity and tax evasion, the Brazilian authorities have implemented a system of universal mandatory electronic invoicing and reporting, based on the Nota Fiscal eletrônica (NF-e). The NF-e form must be generated for any taxable act and submitted to the tax authority for approval in real time. Shipments being transported must also have supporting documentation showing that this electronic reporting has been completed.

Some countries have also mandated the use of online cash registers, which provide similar information on retail purchases to the tax authority in real time.

REAL-TIME INFORMATION

Tax authorities have increasingly been creating mandates for the collection of real-time information from both taxpayers and key third parties – such as employers – who generate tax-related information. This provides them with a wealth of data that is not just useful for checking tax information, but also provides a high-quality view into the economy that can be used for central government planning, economic policy, or even testing the effects of policies in the real world. This information is normally more detailed than traditional tax filings, often being transactional rather than aggregated.

CASE STUDY EXAMPLE: RUSSIA

The Russian Federal Tax Service has rapidly created a comprehensive real-time reporting system based on online cash registers, electronic invoicing and, in some cases, direct access to taxpayers' record-keeping systems. This combination has allowed them to massively narrow the VAT tax gap, with the ability to see almost every transaction within the economy. However, critics have painted the tax regime as technocratic and expensive to comply with.

Real-time information can also support real-time compliance activity, allowing the tax authority to use nudges and other interventions to correct non-compliance or an error at the time that it is made, and redress changes more quickly than traditional tax processes. Some authorities are considering using real-time information to accelerate the timing of tax payments too.

A critical knock-on effect of real-time information is that it requires businesses to go digital to support it. This digitalisation can support a wider transformation of the economy and increase competitiveness. The same is true for electronic invoicing and many other effects of digitalisation that we discuss in this section.

TARGETING AUDIT ACTIVITY

If used properly, the detailed and timely information about taxpayers and their affairs that is gathered through the systems that support digitalisation can help to target audits and other compliance activity more effectively. This creates a mutual benefit: honest taxpayers are less likely to be subjected to random audits, and the tax authority is better able to target its activities where they can be most effective in collecting due revenue.

Of course, this is not perfect. Data from taxpayers who do comply can't necessarily help identify those who don't pay or file at all, for example, but better data can drive more accurate and less costly compliance actions.

INTEGRATED TAX SYSTEMS

A significant aim of the most forward-looking tax authorities is to embed tax into what the OECD's Forum on Tax Administration (FTA) terms natural systems. These are the systems where taxpayers are already carrying out their ordinary tax-generating activities – for example, embedding tax into accounting platforms. This is a key distinction from the previous wave of technology, where paper forms were digitised and replicated online.

Instead of tax being a process that takes place at a separate time and in a separate place, tax is automatic and part of the same system as the taxable activity itself. This makes it immediate and invisible to most users, not reliant on voluntary compliance, and highly accurate. As well as providing a smoother and more painless taxpayer experience, this type of system offers potential cash advantages to tax authorities. If real-time information drives an increase in real-time taxation, then this could close the gap between taxable activity and revenue collection. According to 2020 figures, the countries in the FTA have an estimated €820bn collectible tax debt at any time, so any closing of the timing gap could significantly expand government revenues, albeit as a once-off benefit.

However, while some countries have built tax into their real-time information systems, it is mostly still theoretical at this stage. As countries continue to innovate, the reality of integrated tax systems may move ever closer.

BARRIERS TO DIGITALISATION

While digitalisation has many benefits, it is not always without its difficulties. Some challenges are temporary, like poor change management; some can be worked on, such as taxpayer reticence, but issues such as digital exclusion will always be with us. In this section we review some of the key barriers to increasing the digitalisation of the tax system, along with considerations for how to ameliorate them.

DIGITAL EXCLUSION

The challenge most mentioned in our interviews is that of digital exclusion, whereby some taxpayers are unable to keep up with changing requirements due to an inability or unwillingness to use digital methods to interact with the tax authority. There are a multitude of reasons for this exclusion, such as a lack of digital skills, distrust of online interaction, remote location away from reliable internet infrastructure, poverty or disability.

Many of the benefits of a digitally transformed tax ecosystem are undermined if large numbers of taxpayers continue to use paper, in-person, telephone or other older systems to interact with the tax authority. These methods cost considerably more to operate on a per-taxpayer basis. Having substantial activity outside the digital fence also undermines the accuracy of data analytics and eats into the efficiency of, for example, targeted auditing.

Many tax authorities have sought to maximise the uptake of digitalised reporting and payment methods, most commonly by making them mandatory. However, for the digitally excluded, this approach can be painful. Some countries have pressed ahead, requiring taxpayers to pay for assistance in filing if they cannot do it themselves. This raises a question over fairness, for example, for filers with some specific disabilities who may be unable to comply digitally through no fault of their own. Other countries have made electronic filing optional but have provided incentives, such as later payment deadlines or faster rebates, to those choosing to use it. Still others have made digital interaction mandatory but with exceptions allowed in some cases.

Tax authorities also need to consider different responses for different groups of the digitally excluded. Those without the financial means or computer knowledge to file electronically could be supported with incentives for buying computer equipment or digital skills courses. Government tax awareness campaigns or courses can also educate taxpayers about how taxes work and what they are spent on. This can help build trust with those who do not file digitally because of doubts about the system. Those without reliable internet access could be brought into the fold with an expanded network. But some causes of exclusion, such as disability, mean that it will never be practical to bring all taxpayers onto one system.

For personal income tax, digital exclusion affects countries differently based on their circumstances. One key difference we identified in our research was whether mandatory annual filings were needed for all taxpayers or not. In countries with universal filing, there was usually more knowledge of tax matters, and a healthy high street tax filing industry to ease the transition and support taxpayers. In countries where most citizens do not need to file, digital exclusion was a more significant concern.

There is no complete solution to the issue of digital exclusion, but it remains a key consideration for any digital development programme.

IDENTIFICATION

Digitalisation can provide a significant boost to cross-government departmental working, and tie together information from third parties to create pre-populated and accurate automated tax returns. However, these improvements rely on having a common and reliable identity system for taxpayers that is used by all parties. In countries such as the UK or US, where there is no universal citizen ID, this can make reconciling and connecting different players in the tax system a significant challenge.

CASE STUDY EXAMPLE: ESTONIA

The Estonian e-ID card combines Estonians' online and offline identities in a single card. This ID is used across all government departments and for a wide range of third parties, all of which share data through a single data platform called X-Road. The card uses two-factor authentication for security and can also be used to make legally recognised electronic signatures.

Identification is relevant not only for tying together datasets, but also for taxpayer security. Confirming a taxpayer's identity is necessary to allow them to securely access their records and make filings and payments. In a world where 100% of interaction can be remote, denying access to malicious impersonators is challenging yet essential. The system needs to prevent fraud and inspire confidence, or taxpayers will not trust it or engage with it, reducing its effectiveness. Some tax authorities have experimented with novel approaches to taxpayer security. For example, Australia has led on using voiceprint ID for callers using their helplines. On the wider scale, as more work and social interaction move online, robust digital identity is becoming increasingly necessary for participation in society.

On the flipside, for tax agents and advisers, the ability to act easily on their clients' behalf is essential, especially if they wish to make efficiency gains such as by automating certain interactions. But this is not simple. Agents need to be able to identify themselves easily and gain access to a client's tax affairs without compromising the security of the system. Some countries tie access to a specific person employed by the agent, which can cause difficulties if they are unavailable or move to a different role. But granting access to the entire organisation is also problematic, potentially allowing unrelated staff to snoop on clients' affairs. There is no simple answer to identification that perfectly balances simplicity with security.

CHANGE MANAGEMENT

Whichever new way of working is chosen, digitalisation represents a major shift to the way that tax works. Moving from the previous system to a digital-first system can entail significant complexity and cost for taxpayers, and a rushed or poorly planned transition will reveal any flaws in the design of the new system. The tax authorities in our case studies have adopted a wide variety of strategies to handle the changeover.

The most common tool to anticipate and minimise issues is to use one or more pilot programmes and/or a staged rollout of the new system. This allows taxpayers and the tax authority to test out the system and identify any issues or unanticipated barriers before it must bear the weight of the full tax compliance process. It also gives taxpayers more time to get their systems ready to comply, which is particularly important if the new process requires transactional and/or real-time data and is significantly different to previous processes. A pilot or a staged rollout also allows third-party stakeholders, such as information and technology providers, the time they need to support the transition.

Local factors may determine how different countries choose to roll out their plans. For example, Russia rolled out by geographic area, Brazil by business sector and the UK by tax type. For specific areas, such as business taxes, some countries chose to base the rollout on the size of the company. Many countries have implemented a soft rollout, with the new rules initially introduced as an optional alternative but becoming mandatory on a defined later date. No one system is right in all circumstances.

This is also an area in which inertia can play a big part. Many of the more established economies in our study struggled to adapt their large and interconnected legacy systems to new ways of working, while smaller countries or more recently independent ones were able to modernise more quickly.

Public opinion on changes to the tax system can also vary significantly. Several studies have shown that countries with higher rates of taxation have higher levels of tax morale (a population's opinion on and willingness to pay tax), but the direction and nature of any causal link is unclear. One theory is that of the fiscal contract, which suggests that a clear link between the revenue collected and the provision of valued government services increases citizens' satisfaction with and trust in the tax system, so they are happier to pay higher rates. Conversely, perceptions of government corruption or waste decrease compliance and increase resistance to change.

Improving tax morale is a significant challenge, as it requires large-scale improvements in how the government performs its duties and how it is seen to do so.

DELIVERY CAPABILITY

Digitalisation projects are often ambitious, reaching across multiple government departments and requiring collaboration with third parties. There are several organisational barriers that can make these changes more difficult.

For example, creaking legacy systems can delay improvements and increase costs. Even more modern systems can cause issues if they aren't compatible with other stakeholders' systems or if information is stored in different ways, a common outcome if there is a lack of joined-up planning across government. Digitalisation projects tend to be multi-year endeavours, so having consistent support and funding from ministers throughout changes of government is crucial.

Difficulty attracting and retaining the right skills is also an issue, with digital and especially data analytics skills being very much in demand. Many of our case study countries reported difficulties in finding the right staff and keeping them long term.

COMPLEXITY

Not all tax ecosystems are equally amenable to digitalisation. The underlying complexity of the tax system – both in terms of the tax rules and any existing legacy systems – can significantly impact how effective automation and data analytics are in each case. Some kinds of complexity are particularly troublesome: for example, if the system contains many options and elections, or if significant elements of the tax base, such as capital gains transactions, are outside of the tax authority's data collection activities. Different types of economies will also have different levels of suitability for digitalisation. For example, economies which are services-led will be more digital by default than those based on agriculture or natural resources.

Modernisation programmes are more challenging the more they are needed: for example, where legacy data is mostly stored in paper or in unconnected computer systems. It is no coincidence that many of the more successful digitalisation projects in our case studies are in countries that gained independence relatively recently. Perhaps in the future, tax policies will be designed with digital administration in mind, and meaningful simplification will be made to accommodate it, but we have not seen evidence of this yet.

CASE STUDY EXAMPLE: NEW ZEALAND

As they grow, tax systems normally become more complex as successive governments introduce more legislation. By contrast, the New Zealand tax system is intentionally designed to avoid complexity, for example by minimising exceptions and deductions for most tax types. This simplicity has helped to maximise the impact of the country's ambitious digitalisation efforts, as most computations can be completely automated from the records that the local tax authority receives.

LEGISLATION

Digitalisation projects can move fast, developing capacity as the underlying technology grows in sophistication, but this can sometimes leave the underlying legal framework trailing behind. Several of our case study countries, such as Nigeria, have run into challenges from taxpayers on whether the tax authority has the appropriate powers to demand information in a digital format, or the ability to use digital data as evidence in tax law cases.

IMPACT OF THE COVID-19 PANDEMIC

Since our last report in 2019, the coronavirus pandemic has fundamentally reshaped both the working and wider world. Lockdown measures have been widely adopted, leading to a sudden change to remote and hybrid working that is becoming more entrenched. Businesses and individuals were put under extreme financial duress, leading to a rise in direct governmental support, such as furlough schemes or direct financial support payments, as countries looked to prop up their economies.

Tax authorities had to move to completely remote filing and auditing at short notice and, in some countries, even had to scale back compliance activities. To support their countries' economies through difficult times, tax authorities in many countries enacted simple policies covering only their usual tax-related responsibilities, such as allowing later filing and payment of taxes or speeding up the timeline of rebates. But, in many countries, they were also charged with organising support payments or loans as the government agency with the greatest visibility of citizens' financial affairs.

In the UK, for example, the targeting of the support offered was limited by the constraints on the information available to government. This fact itself reflects the incompleteness of digital transformation. In a fully digitalised world, the data in one part of government would be easily transmitted, understood and used by any other part of government, and collection from third-party sources would be widespread and streamlined.

The changes have had short- and long-term impacts on the digitalisation process, both positive and negative.

In the shorter term, many authorities have had to put long-term transformation plans on hold to deal with the immediate impacts of lockdown measures. While most tax authorities in our case studies already had substantial digital elements to their tax filing and payments systems, auditing and other compliance work has typically been more face-to-face. Tax compliance and any remaining analogue filings have had to be moved online in a hurry.

Longer term, the forced experimentation with remote working during the pandemic has led to an explosion in video conferencing, cloud and other technologies that will form a bedrock of support for digitalisation in the future. Having had no choice but to provide remote alternatives, tax authorities will now have these innovations as the basis for a future that reduces the need to store physical records and meet with a tax inspector in person.

CASE STUDIES

This report's conclusions are based on 10 case studies, each of which was built based on interviews with ICAEW members, tax authorities and other stakeholders, alongside extensive desk research.

The following table provides an overview of the 10 countries and the key reasons to read each.

Country	Read for:
Australia	Successful transformation despite mixed relations with tax agents.
Brazil	Widespread electronic invoicing to tackle avoidance.
Estonia	Exemplary digitalisation that shows what is possible.
Japan	A different angle on digitised records.
Kenya	Extensive change accelerated by the adoption of mobile money.
New Zealand	The benefits of a commitment to simplification.
Nigeria	Halting progress in digitalisation, much needed to combat corruption.
Russia	Expansive change that caused teething issues for taxpayers.
United Kingdom	A second-wave transformation project that has struggled to keep to a change plan.
United States of America	How lobbying has led to relatively low levels of modernisation.

AUSTRALIA

OVERVIEW

Australia is a geographically isolated country with a relatively short history of tax law (federation occurred in 1901). The Australian Taxation Office (ATO) oversees tax as well as superannuation, student loans and some other government payment schemes. All Australian citizens are required to file an annual tax return. This has led to a healthy high street tax advisory industry and a high level of engagement with the tax system among Australians, particularly around allowable deductions. Investment in rental property is more common than many similar economies. The estimated tax gap in Australia is low compared to other similar economies, at around 7.3% according to 2018-19 ATO figures.

DIGITALISATION

Australia started implementing a cross-government programme of digital transformation, called Digital by default, in 2013. This includes significant digitalisation of the ATO and its work. Pre-populated returns for individuals have rapidly expanded and are both fast and accurate, based on an ever-increasing base of data collection carried out by the tax authority. The most significant recent addition, rolled out from 2018, was Single Touch Payroll, a real-time payroll reporting system. All employee pay details are remitted to the ATO as they are being paid and can be viewed immediately on the tax authority's system. Other newer sources of data include cryptocurrency exchanges. These data sources also inform the ATO's tax auditing activities.

While some areas such as deductions are not covered by the pre-populated base, the third-party filing software market has developed in partnership with the ATO and is of a high quality. Digital exclusion has had a minimal impact, as most Australians are already using a tax agent to assist with their returns.

Online filing is also available for companies but is less developed than the system for individual taxpayers and paper filing is still commonplace. However, integration between accounting systems and the ATO's filing systems is increasing as software developers continue to work on the area. The Australian government has announced that electronic invoicing will be available for all B2G invoices, with consultations underway for expanding this to all B2B invoices.

Digital identity is proven using an email address, password and a mailed login link. Agents can work online in a single system that integrates with their customer management systems.

The ATO supported the Australian economy through the pandemic via direct cash payments and other schemes to avoid lay-offs. The system was thrown together in the span of about a month, relying heavily on tax agents to help taxpayers make applications. This rapid response was possible only because of Australia's advanced stage of digitalisation. The rise in the popularity of home working has driven an increased interest in deductible expenses, which may put pressure on the pre-population system in the future. The transition to remote working did bring challenges, particularly for smaller businesses that were more used to paper-based administration.

CHALLENGES

While pre-population has been successful, there are still some large areas – such as rental income – outside the scope of this system. Greater automation of the system is reliant on a resolution being found for this. The Australian tax code has an extensive range of allowable deductions, which are also not visible to the pre-population system. Taxpayers may miss out if they do not pay sufficient attention.

There are mixed sentiments around the relationship between the ATO and tax professionals. The ATO offers a range of free and automated tools for tax returns, which some interviewees felt indicated a desire to undercut the advisory market. The ATO denies this, pointing to an important role for agents in supporting taxpayers to identify savings, and valuing the multiplicative effect that agents can add when promoting digital offerings. The ATO's position is backed up by the minimal decrease in the share of returns filed by tax advisers since the introduction of pre-population.

Digital identity is challenging in Australia, with no universal identifier in place. While there is a portal called MyGov.au, which brings many different services together, each must be added individually and some services are not yet available. A more recent optional government identifier called myGovID was launched in October 2019, but initial take up was slow. The programme is treated with some scepticism after an earlier attempt in the 1980s to bring in a similar system failed amid privacy concerns. ID fraud and other concerns are still being heard now. Agents have also struggled to access their clients' tax affairs. For example, for a period after launch, correspondence was not visible to agents using the ATO portal.

There are still complexities in the Australian tax system that make compliance more difficult than it needs to be. For example, states impose an employer's payroll tax that uses a different definition of an employee vs a contractor than is used for superannuation. This, in turn, is different from the pay-as-you-go payroll definition. The business and GST rules are different again. These sorts of differences are coming under increasing pressure from the growth of the gig economy and other non-traditional ways of working.

CONCLUSION

Australia's digitalisation programme is advanced and successful, and its quick reaction to the onset of the pandemic is evidence of this. Pre-population is reducing the administrative burden on taxpayers and increasing the efficiency of paying taxes. The next target for the tax authority will be to expand the net of its third-party data collection to cover more elements of the tax system, such as rent and allowable deductions.

With some initial hiccups on implementation and wariness from the large tax advisory market, the relationship between them and the ATO is not perfect. However, the bulk of the feedback was positive on how the ATO supports agents and relies on them to promote their programmes, and so with continued attention this can be improved.

BRAZIL

OVERVIEW

Brazil's economy mixes substantial elements of service and industry with agribusiness. Historically, its economy has grown strongly, although the country suffered a recession from 2014 to 2017. While the economy is one of the world's largest, the country also suffers from substantial wealth inequality and corruption. The untaxed grey economy is estimated to make up around 40% of GDP.

Brazilian federal taxes are administered by the Receita Federal do Brasil (RFB), although there are also state and municipal-level taxes. The Brazilian tax system is among the most complex in the world, with over 60 forms of tax being collected and thousands of rules in place. The World Bank and PwC report *Paying Taxes 2020* cites Brazil as the most arduous country to comply with taxes. Various reforms and improvements have led to a substantial decrease in the time needed to comply with Brazil's taxes, with the report estimating that the figure has fallen some 1,100 person-hours per annum from 2004 to 2020. Still, the average time for a mid-sized company to meet its obligations is estimated at 1,500 person-hours per annum.

In response to the pandemic, the Brazilian authorities relaxed many filing and payment deadlines, and instituted a programme of welfare payments for the poorest citizens.

DIGITALISATION

As part of efforts to tackle corruption, capture more trade in the tax web and increase the attractiveness of the country to investment, Brazilian authorities have increasingly digitalised their tax system. Companies are required to use a prescribed chart of accounts for their bookkeeping and submit transaction-level data on their accounting and taxable activities. This detailed information helps to inform the authorities' compliance work with the use of data analytics.

The other significant element of the Brazilian system is the Nota Fiscal eletrônica, an electronic invoice system that was rolled out per economic sector from 2009. This requires that all B2B and many business-to-consumer (B2C) invoices use one of a selection of standard electronic invoice formats, submitted on a government portal. This makes transactions immediately visible to the RFB, and they must pass an automated approvals process before the invoice is passed to the purchaser.

A notable innovation to try to catch undeclared sales for VAT purposes in some Brazilian states has been the introduction of a small VAT rebate, which is paid to customers when their purchases appear on a VAT return. This motivates citizens to inform the tax authority if their purchase goes unreported, effectively creating an army of part-time tax inspectors.

CHALLENGES

While the 1,100 person-hours per annum reduction mentioned above is substantial, this still leaves Brazil some 500 hours adrift of the next most arduous tax regime. While digitalisation has helped to improve this somewhat, the extensive requirements and exacting specifications have made compliance a significant expense for corporations operating in Brazil.

Likewise, the various prescribed formats that the RFB requires for invoices, charts of accounts and so forth mean that international businesses often struggle to adapt to local requirements. Even domestic entities can struggle, especially ones with more unusual business models or transactions if the templates provided don't cover their needs. While local software companies have created solutions over time, when these were first introduced the cost to adapt pre-existing systems was estimated by one interviewee as being around 10-15% of the cost of a full new accounting system.

CONCLUSION

Two substantial obstacles to Brazil's efforts to digitalise the tax system are the large informal and untaxed economy on the one hand, and the inherent complexity of the tax system on the other. While far-reaching programmes have aimed to close the large tax gap, it has also led to further complexity in how taxpayers report and pay their taxes. While the total time spent on tax compliance in Brazil has come down substantially as digitalisation and modernisation have progressed, there is still a very long way to go.

Without making fundamental simplifications and overhauls to the country's tax system, the digitalisation project can only go so far. There are current proposals to, for example, merge the no less than five indirect taxes levied on Brazilians into one federal-level tax. These kinds of advancements will be necessary if further automation and efficiencies are to be gained.

ESTONIA

OVERVIEW

Estonia emerged from the Soviet Union and gained its independence in 1991. In the early days of the post-Soviet period, the Estonian government decided to invest heavily in the emerging field of digital technology, in particular computer education and digital government. It has maintained this focus, with Estonia's reputation in the arena leading to the nickname e-stonia. The country is home to one of the world's highest densities of digital start-ups, as well as several international digital agencies such as the EU's IT agency and the NATO Cyber Defence Centre of Excellence.

The country's 1.3m population is relatively centralised, with 440,000 living in the capital Tallinn, and no other cities having over 100,000 residents. The tax system, administered by the Estonian Tax and Customs Board, is relatively simple, with mostly flat taxes. Unusually, the corporation tax system only taxes distributions of profits to shareholders and not the profits themselves.

DIGITALISATION

The principal system of digital government in Estonia is the X-Road platform, a unified data platform that allows for seamless sharing of data across all government departments and third parties such as doctors' offices and private sector players such as banks. Data entered in any system is automatically made available to all others that might need it. This has also led to some of the most extensive pre-populated tax returns anywhere in the world, with an Estonian citizens' return taking

only three to five minutes on average to complete. Pre-population extends not only to employment and interest data, as in many countries, but also to data such as sick leave calculated from the digitised healthcare system.

This extensive system relies on a high-quality national ID system: the e-ID card. It uses two-factor authentication to provide proof of identity for Estonians and allows for electronic signing of transactions with full legal equivalency to paper signatures.

According to the World Bank and PwC *Paying Taxes 2020* report, it takes a medium-sized company 50 hours to comply with its Estonian tax filing obligations annually, the fourth lowest of any country. The difficulty of making corrections is the second lowest in the world.

CHALLENGES

Modern Estonian society places a strong emphasis on individual freedoms, which contrasts with both the former Soviet period and the extensive and comprehensive data that the X-Road platform collects. This has necessitated building trust in government. Estonians have accepted the loss of privacy in exchange for the convenience, but this would not be the case in many other countries.

Reducing the barriers to tasks such as company creation has led to a rise in certain forms of crime. For example, company registration takes only a few days and can all be done online. There has been a rise in corporate tax fraud utilising false companies as a result.

Despite having enshrined access to the internet as a fundamental human right as early as 2000, digital exclusion is not eliminated in Estonia, especially in the more remote regions and amongst older citizens. There is still a demand for more traditional forms of interaction outside of the digital administration.

CONCLUSION

Estonia had the perfect circumstances for optimal digital transformation – a clean starting point from the post-Soviet period, a small population, simple taxes, and a commitment to investment from successive governments. It has capitalised on these factors to produce a world-standard digital government platform that supports not only simple and quick taxes, but also a reduced burden of administration across all areas of life and business.

While Estonia's situation is uniquely advantaged, its model of universal integration, strong digital identity systems and law, and long-term commitment and planning are lessons for any country looking to make improvements to their own bureaucracies.

JAPAN

OVERVIEW

Japan's bureaucracy relies extensively on paper documents, which are personally endorsed by notaries or senior businesspeople using traditional hanko seals. This paper-based system has led to the continued popularity of fax machines and the need for senior executives to spend significant time on paper administration. Cash payments still make up a clear majority of retail purchases.

The Japanese tax system is administered by the National Tax Agency (NTA), and the principal forms of taxation are consumption taxes (34%), personal income taxes (30%) and corporate income tax (19%). Notably, tax only accounts for about 63% of Japanese government revenues, with the remainder coming from various government bonds.

DIGITALISATION

The focus on paper administration extends to the NTA, which until 2020 required companies to apply for a permit to be allowed to store their records electronically. Most companies were unable to meet the stringent quality requirements for this. As of 2021, the system still requires a very high standard to allow electronic recordkeeping. This is in contrast to the majority of countries around the world, where authorities have been pressuring companies to accelerate their digital adoption. However, companies are incentivised to move to electronic recordkeeping where possible, as this affords them certain tax advantages such as rolling forward losses.

Japan has invested in making the NTA website simple and accessible, including options for screen readers, and has also supported a mobile-optimised version. This has been paired with a series of outreach programmes such as a tax awareness week and a tax museum to help educate Japanese citizens on the importance of the tax system. However, most Japanese employees do not need to file individual tax returns.

Faced with the COVID-19 pandemic, Japan relied on its previous experience handling emergencies such as typhoons. The NTA extended filing and payment deadlines, reduced or postponed payments, and allowed enhanced deductions for related expenses. The government has also been pushing for measures to reduce the need for paper records and hanko stamps and increase the role of electronic signatures.

CHALLENGES

Japan's unique paper- and hanko-based bureaucracy is time-consuming, difficult for companies to comply with and requires many companies to retain significant amounts of paper records. The system is especially challenging for multinationals to understand and handle without local Japanese experts. The stringent rules required to qualify for electronic recordkeeping make this a challenge to attain, and the penalties for failing to meet the exacting standards once qualified are significant. The hierarchical nature of Japanese culture also makes compliance changes difficult, as more junior staff charged with making changes are often unable to effectively make demands of more senior staff.

CONCLUSION

Japan's cultural attachment to paper recordkeeping has held back the effectiveness of many modern innovations and efficiencies. This has spread to the tax system as well, with the NTA initially taking almost the reverse approach from other jurisdictions by limiting electronic recordkeeping to those who qualify and apply for permission, rather than trying to encourage all companies to move to those standards. This means that Japan's digital tax journey lags behind many of its economic peers.

On the other hand, experience of previous natural disasters and adapting to them did afford the Japanese authorities an advantage in responding to the COVID-19 pandemic. With previous experience in selecting policies to support the affected, and adapting administration to changing circumstances, they were able to quickly make the required changes. Other administrations should seek to learn from the pandemic in kind and consider how they can plan for any future disruptions.

KENYA

OVERVIEW

Kenya is one of the largest economies in Africa, with its GDP dominated by services (42%) and agriculture (35%), according to 2020 figures from Statista. While services make up a larger share of GDP, subsistence farming accounts for about half of agricultural output. The sector accounts for almost 75% of working Kenyans, many of whom work in informal employment on family farms, leaving a relatively small proportion of citizens working in traditional wage-job roles. Corruption is a significant issue in the country, which ranked 128th out of 180 countries in Transparency International's Corruption Perceptions Index in 2021.

Kenya has highly developed mobile money infrastructure. This has grown out of mobile phone-based payments infrastructure that started with the M-Pesa mobile money service in 2005. It allowed customers to use their pre-paid mobile phone credit to make payments for airtime or for other products. It now supports payments, transfers and credit. The system has grown to cover over 25 million users and has been particularly impactful on reaching unbanked and informal economy participants, bolstered by the fact that mobile network coverage is better than internet coverage.

Taxation in Kenya is administered by the Kenya Revenue Authority (KRA) and consists of a typical mix of tax types.

DIGITALISATION

Over the last 20 years, Kenya has moved from a very manual and paper-based system, which required frequent interaction with physical tax offices, to an increasingly digitalised one. The old system was inefficient and little track was kept of whether filings were made. Chasing was done primarily by phone, which led to low levels of compliance, especially among smaller companies.

The digitalisation process started slowly, with the KRA asking tax inspectors to use their own devices to complete their work, but it has since grown and become more formalised, with a portal called iTax launching in 2014. Now much of tax administration and especially audits have become electronic and data focused. As well as increasing oversight and compliance, this has also eased filing for taxpayers and the volume of paperwork needed has decreased dramatically.

There is usually no need for employed individuals to interact with the system as it is covered by PAYE, but the portal does allow employees to check that their employer is filing their taxes correctly. Digitalisation has also increased business confidence in areas such as imports, where previously rules around duties were unclear and were applied somewhat arbitrarily, and two identical consignments could be taxed differently depending on the border agent's judgement.

The KRA has also integrated M-Pesa into its systems, accepting payments through the service, which automatically generates proofs of payment. M-Pesa and its peers have driven a rapid formalisation of the Kenyan economy, with entrepreneurs and market traders alike now able to easily access payments processing systems as well as short-term credit. The increased visibility of commerce has helped the authority to track and tax these activities.

Kenya prides itself on being more digitally advanced than many of its African peers, and there has been encouraging focus on modernisation from the government. The country has both learned from its neighbours and provided an example for them, and competition in the region has helped to drive developments in digital administration. Plans are in place to require electronic invoicing from mid-2022.

CHALLENGES

The relatively late start to digital transformation in Kenya led to difficulties when the system changed all at once. Little planning was put into closing down the legacy paper system, and opening balances have subsequently been an ongoing source of difficulty. The KRA is continuing to work through the backlog, sometimes asking for paperwork from the pre-iTax period (pre-2014), which taxpayers are usually unable to supply.

The system is also quite inflexible and poorly documented, and interviewees highlighted several cases where certain tasks were tricky to complete using the tools provided, and where agents needed to learn workarounds from colleagues in the absence of clear guidance. The tax authority has been unable to effectively resolve some issues – for example if a payment was accidentally made without a proper identification number, it could be impossible to allocate this payment correctly to a taxpayer.

The system also struggles with reliability at times of peak demand, such as near filing deadlines. In recent years, efforts to increase capacity have lessened these issues, but trust in the system is still recovering. Furthermore, the increased focus on digital interaction has meant that standards of customer service for other routes, such as technical enquiries by telephone, have slipped – a trend not unique to Kenya.

Since 2016 there has been no option for manual filing for businesses, which has necessitated some to use agents. However, no automated filing application program interface (API) or process is available to agents. While most businesses are concentrated in Nairobi and other urban areas, internet access further afield is unreliable and small companies in these areas can effectively fall outside of the tax net as a result.

The existence of a digital platform has helped Kenya adapt to the COVID-19 pandemic, but some areas have remained problematic. For example, remote audits have been challenging as the KRA does not have a secure data transfer platform and taxpayers have had to email sensitive documents to auditors. This security concern also extends to tax agents, who must share a login and password with

their clients. Even areas which nominally require additional credentials if done by an agent can be completed by simply claiming to be the taxpayer themselves. The iTax platform also struggled to support some emergency measure lower tax rate bands.

CONCLUSION

Kenya has gone from a completely paper-based system to a primarily digitalised one in an impressively short time. The KRA has been able to leverage the impact of M-Pesa to increase its reach and effectiveness as a revenue collector. The reduction in paperwork this has seen has been dramatic. The country has also benefitted by both learning from and competing with its neighbours and peers.

However, the system is quite inflexible and lacking documentation, with poor change management around the handover from the previous system. This has led to significant and ongoing difficulties, as users have had to cobble together solutions from peer learning. Security concerns are also important, and the Kenyan authority should prioritise increasing security and transparency in order to increase the efficiency and trustworthiness of the system.

NEW ZEALAND

OVERVIEW

New Zealand is a highly developed but relatively small economy, with around two thirds of GDP in 2020 coming from services, according to government statistics. Due to its geographic isolation, the New Zealand economy is one of the most globalised in the world and depends heavily on international trade. The country is generally ranked among the least corrupt in the world and as one of the highest for social progress.

The Inland Revenue Department (IRD) oversees New Zealand's tax system, although some duties are collected by other agencies. Tax law is relatively simple, with personal income tax and goods and services tax as the main sources of revenue. These taxes have few exceptions or deductions. There are no capital gains or land taxes. Most New Zealanders do not need to file tax returns and so the populace in general are not as knowledgeable about tax affairs. New Zealand's long-term taxation policy approach has been to pursue a "broad base, low rate" model.

DIGITALISATION

The IRD launched its first computer system in 1989, which remained in service until the implementation of a new system in 2021. Prior to the COVID-19 pandemic, 90% of employer returns and 99% of tax payments were made electronically, and the tax authority was already investigating the possibility of remote working for staff. When the pandemic began, these plans were accelerated and staff were provided with mobile devices and moved to the cloud.

The tax authority was able to not only continue with business as usual, but also with other digital transformation projects remotely. Experience from previous natural disasters helped the IRD to handle the changes necessary for the pandemic. The new system now collects vast amounts of data to support the IRD's compliance activities and to help the government make evidence-based policy decisions.

The New Zealand tax system is designed to be simple, and exceptions are rare. This is in part to support the effectiveness of the digital platforms that the IRD provides, as most taxes can be computed automatically from relatively little information. For new digitalisation projects, the IRD's development approach is to work with cross-departmental teams and not start any development until the targeted problem is fully understood. There is a strong emphasis on agility, for example on the ability to implement a policy change within the same parliament that institutes it.

As well as its role as a tax authority, the IRD also pays out several government schemes, such as paid parental leave. This role expanded during the pandemic, with support schemes originally administered elsewhere in government eventually coming under the IRD as the department with the best access to citizens' and companies' data. The IRD estimated that handling approximately 100,000 small business loan scheme applications required only about 50 phone calls.

CHALLENGES

The no-exceptions approach and simplicity of both tax and the digitalised system used to collect it can make compliance hard work for tax professionals. The IRD generally provides data in whatever format it prefers, and requires data submitted to it to meet its own prescribed format, making more work for the taxpayer and their agent. The system is also not particularly designed for agents' needs, for example not supporting mass automated filing of information for multiple clients.

Similarly, digital identity and "know your client" procedures are challenging and getting registered on the system as a newly arrived migrant to the country can be daunting. The authentication process is complicated and not amenable to automation or to delegating authority to a tax agent as a firm, rather than to a specific individual.

The New Zealand authorities have generally tended to lag behind other similar countries when it comes to adopting the latest technology, preferring a wait and learn approach. For example, it has not particularly dived into the use of electronic invoices. It has plans to adopt them for government invoices from the first quarter of 2022. While this has made for smoother adoption, there are potential lost opportunities.

CONCLUSION

New Zealand's twin focuses on simplicity and agility have allowed it to build a tax reporting system that can handle sudden changes of direction well – whether from internal policy change, or external events such as the COVID-19 pandemic. The IRD has been able to create not only a system for filing and paying taxes, but also collecting economic data and making payments where needed. This multi-purpose role provides greater value to the New Zealand government than just collecting revenue.

However, simplicity can easily become inflexibility for users, and some systems are not designed for agents to use or automate. Therefore, some taxpayers and their agents have been left to bear the costs of the IRD's exacting requirements. And the IRD could be more ambitious in adopting the latest in technology to further build on their successes thus far.

NIGERIA

OVERVIEW

Nigeria is the largest economy in Africa, with manufacturing, services and many other sectors making up its mixed economy. Oil revenues make up less than 10% of GDP, but account for over half of state revenue thanks to substantial levies on this sector. The legal system includes a mixture of elements from pre-colonial English common law, post-colonial Nigerian common law, and in some locations Sharia and/or traditional indigenous law.

The country is highly federated, with 36 states and 774 local government areas. Although federal taxation powers are centralised with the Federal Inland Revenue Service (FIRS), each state also has its own tax authority and spending priorities. Differences between how the states administer taxation increase the complexity of being a Nigerian taxpayer.

Corruption is a significant challenge in Nigeria, which ranked 154th out of 180 in Transparency International's Corruption Perceptions Index in 2021. The problem extends to the FIRS itself, for example, the UN Office on Drugs and Crime estimates that around a quarter of those interacting with tax officers in 2019 had paid a bribe.

DIGITALISATION

Nigeria has made several attempts to modernise its tax administration by introducing various online provisions. However, the timelines for these projects, which are not seen as a priority, are often subject to delays. The FIRS instead prioritises projects that it perceives as adding to revenue more directly. In 2020, electronic VAT filing was set up and run for a few months before the system failed and had to be retired. The service was then relaunched in May 2021 and has been working well since. A new corporate income tax service was also launched in mid-2021 and has worked, albeit reportedly with slow responses or inaccurate computations at times.

These digital services reduce the need for interactions with physical tax offices, which increases efficiency and decreases the risk of a bribe being solicited. So far the use of digital systems has not been mandatory, and smaller companies are exempted from filing altogether.

For much of the COVID-19 pandemic, the electronic filing system was not yet ready, but FIRS accepted scanned documents via email. While this does raise some security concerns, there was sufficient flexibility within the system to work around lockdown restrictions. For the 2021 filing period, FIRS launched a portal once again – although this was announced only weeks before it was due to take effect.

CHALLENGES

As mentioned above, the various attempts to create electronic filing and payments systems have been inconsistent, with frequent outages at times of peak demand. The new corporate tax system only supports Nigerian naira transactions, which excludes some upstream oil and gas companies that usually file in US dollars and had to file manually. Security concerns have also been raised about these systems, which usually require only a simple password-driven login and are therefore relatively vulnerable for the importance of the information they contain.

In addition to these planning and project management issues, some processes, while allowing online filing or payments, still required receipts to be printed and taken to a tax office for vouchsafing. This additional step negates any efficiency gain or potential reduction in opportunities for corruption.

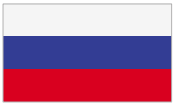
There have also been legal challenges against FIRS from taxpayers who do not believe that the proper legislative support exists to allow mandatory electronic filing, or even the use of electronic submissions as evidence in court. These challenges increase uncertainty over the system and act as a further disincentive toward investing in digitalising the tax system.

CONCLUSION

Digitalisation is still in its early stages in Nigeria, and there is much still to be done, including working to make future attempts at modernisation more successful. Currently, digitalisation projects tend to be launched at short notice and without sufficient resources and legislative support, leading ultimately to several failed projects.

The Nigerian administration needs to work on longer-term, legislatively supported, secure and well-planned transformation projects to be able to succeed.

If properly run, digitalisation would not only improve efficiencies for taxpayers in Nigeria but would also support the wider modernisation of the Nigerian economy, particularly for the large number of small and medium enterprises in the country that are not currently digitally aware.



RUSSIA

OVERVIEW

Unusually for a developed nation, the Russian economy is dominated by natural resources, which make up around 60% of GDP and over a third of government revenues. The tax system is relatively simple, with a flat income tax rate, having started from a blank slate after the end of the Soviet Union.

Taxation is administered by the Federal Taxation Service (FTS), which until 2020 was headed by now-Prime Minister Mikhail Mishustin, who heavily promoted digital reforms and increases in the collection of data to combat non-compliance and evasion. Most taxes are federal, but some asset-related taxes are administered at a regional level.

DIGITALISATION

Since 2010, when Mishustin took over as head, the FTS has sought to rapidly and comprehensively expand the data which it collects through electronic invoices for B2B interactions and through online cash registers for retail. Via this real-time system, the FTS has looked to gather data on almost every transaction taking place in Russia, particularly for VAT. The system automatically highlights any discrepancy between input and output VAT, even to the level of one rouble. According to the FTS's figures, the effect was to reduce the VAT tax gap from 20% to less than 1%.

In more recent years, the FTS has begun a new programme of direct access tax monitoring, where some of the largest companies are asked to open their accounting system to the authority for real-time inspection. While the programme currently covers only around 200 very large companies, the plan is to extend it to other large companies soon. The project has been built based on the COSO internal control framework, with entities with stronger controls frameworks afforded lighter audits.

This approach of trialling new approaches before full implementation has been the trend in Russia, with previous rollouts being tested in one geographic region before expanding elsewhere. The trialling process helps to identify any difficulties and provides an opportunity to fix them before they would impact too many taxpayers.

CHALLENGES

The impressive advances made by the Russian administration in rapidly digitalising its tax systems have come at a cost to taxpayers. The exacting standards required by the FTS and short implementation times have meant that significant expenditure has been needed to bring reporting up to grade. Multinational businesses have particularly struggled, as their worldwide enterprise resource planning (ERP) systems often do not support the Russian localisation needed, and they need to acquire local tax registers, convert to Russian generally accepted accounting practices (GAAP), use the Cyrillic alphabet, and so on. Companies need to make significant investment as well as develop manual and semi-manual processes to plug the gaps. The proposed new direct access pilot would exacerbate these concerns if and when extended to smaller businesses.

There has also been some scepticism from interviewees that the tax authority has the capability to make use of all the data that it requests, and that some of the significant effort taxpayers make to comply is wasted. Similarly, some interviewees speculated that the changes are driven by government budget pressures and aiming to increase collections, and it is true that more taxpayers have been winning lawsuits against FTS overreach in recent years.

CONCLUSION

Russia's economy, with its substantial natural resource components, is less naturally suited for digitalisation than service-led economies, which are more digital by nature. However, the FTS has been able to overcome this and made impressive strides in creating a modern tax administration, all but eliminating the VAT tax gap. However, these improvements have come at a high cost for taxpayers, who have been forced to make significant investments to meet the new standards without full confidence that everything they are providing is used. While pilot programmes are used to help catch issues early, the relentless pace of changes is still leaving many concerned that the costs are not worth the benefits.

UNITED KINGDOM

OVERVIEW

The UK is a founding member of the Digital Nations group, a network of the leading digital governments. The group began in 2014 with five founding members, including fellow case study countries Estonia and New Zealand, and has since grown to 10. As such, the UK government has focused on modernising its administration and increasing the efficiency of its services.

Taxation is typical of a large and developed economy and is overseen by Her Majesty's Revenue and Customs (HMRC). Most citizens do not need to complete annual tax returns, as real-time payroll information and pay-as-you-earn deductions account for most employed citizens' needs. Those with more complex tax affairs file annually. Companies normally file quarterly or monthly for VAT and annually for corporation tax.

DIGITALISATION

The UK government has offered online filing for all taxes for many years, and uptake of these options has been high – over 90% in most cases, according to HMRC. However, since 2015, HMRC has been carrying out a second-wave digitalisation programme called Making Tax Digital (MTD). This requires taxpayers to keep digital records and submit information using API-enabled commercial software, rather than manually completing online tax returns.

MTD is designed to increase the ease of paying taxes, by making an automated and high-quality feed of information, and by unifying communication on all tax affairs into a single online account. HMRC is also seeking to get better real-time information about tax affairs, allowing it to target compliance activity and monitor the economy. It is hoped this will help close the tax gap, which was estimated at £31bn in 2018-19. The project's secondary goals are to support the wider digitalisation of the economy by requiring taxpayers to keep electronic records, support a healthy third-party software service market, and to fund the replacement of legacy back-end systems and improved IT systems resilience.

HMRC is already making use of the information it holds to pre-populate individual income tax returns, for example with payroll data that is filed in real-time by employers. There are plans to extend this to more areas over time. The real-time information system has also allowed HMRC to adjust collections to reduce over- and underpayments, although not to the extent that was hoped at the outset.

More recently, the COVID-19 pandemic has further accelerated the adoption of cloud storage by HMRC. Like many tax authorities, HMRC was called upon to implement emergency support measures and distribute loans and payments. These schemes were implemented very rapidly, in part due to the flexibility that the agency's digital transformation so far has afforded it. These systems were also able to resist fraudulent claims to some extent, based on the information gathered by the wider tax system, although this targeting and auditing was not perfect as discussed in the 'Impact of the COVID-19 pandemic' section.

CHALLENGES

The original timeline for MTD would have begun in April 2018 with income tax, but the plans have been repeatedly amended and delayed. From April 2022 all traders must report their VAT figures using MTD-enabled commercial software, but a planned expansion to income tax has been delayed a further year to 2024 and to 2025 for partnerships. The timeline has had to be changed due to pushback from taxpayers and others, who felt that the timeline was too challenging. There has also been valid criticism that the original ordering of the rollout (starting with income tax, then moving to VAT and then corporation tax) would require the smallest taxpayers to bear the burdens of transformation first. The timings were sufficiently tight that pilot programmes would not be completed before the launch was due.

Both Brexit and the COVID-19 pandemic have contributed to the delays by pulling away HMRC resources. However, there does not seem to have been a reconsideration of the project's parameters and goals since its conception in 2015. The proposals will

mean additional costs to taxpayers to digitalise their recordkeeping and reporting. While HMRC has indicated that free software will be available for smaller taxpayers, it is not developing such software itself and it is not clear where this provision will come from.

With no national identity system, digital identity has been another sore point for HMRC. The most commonly used identifier, the National Insurance number (NINO), does not cover all taxpayers and is not necessarily linked to other forms of identity such as passport or driver's licence. This has caused difficulties for taxpayers, who have struggled to set up their online accounts or to get their agents properly authorised. HMRC has had to consider exempting some taxpayers from digital mandates as "digitally excluded", simply because they lack a NINO. Elsewhere, low identity requirements when registering for self-assessment has led to high levels of attempted fraud from attackers posing as taxpayers requesting illegitimate refunds and grants.

The UK is also investigating the possibility of introducing real-time or more frequent tax payments to go along with existing real-time information. It is not clear that there is a desire for this from taxpayers; instead the goal seems to be to garner a one-off cash flow benefit.

CONCLUSION

The UK has positioned itself as one of the most digitalised tax regimes in the world, with a long-term project to overhaul its ways of working and an extensive real-time information collection apparatus. This supports analytics for targeting tax audits and uncovering tax fraud and error.

HMRC is currently attempting to build on this base with an ambitious second wave, which will require substantial changes for many taxpayers, but has been met with a series of project management delays and failures. While some of the circumstances are outside of HMRC's control, issues such as incomplete pilot schemes and lack of a universal taxpayer identifier are not. The halting and inconsistent progress with the MTD programme has caused a lot of uncertainty for taxpayers, and the requirements are likely to result in significant changes for many.

UNITED STATES OF AMERICA

OVERVIEW

The US federal tax system is primarily run by the Internal Revenue Service (IRS), with some minor taxes administered by other agencies. While this report focuses only on national-level taxation, it is worth mentioning that the 50 states each levy their own taxes, with as many differences in rules and procedures as between many countries. This makes compliance that much more complex for US taxpayers. The US also, almost uniquely, collects taxes on citizens' worldwide income, even for non-residents.

All US individual taxpayers must make annual filings and, thanks to the complex system of deductions and credits, it is normal for most taxpayers to be owed a credit at the end of the tax year. This has supported a wide array of third-party filing businesses, often run alongside other businesses. Identity fraud around tax rebates is common.

DIGITALISATION

The IRS has been attempting to modernise its systems for some years, but delays have been frequent as the agency's budget is a common political football. The COVID-19 pandemic helped to accelerate these plans somewhat, finally helping the IRS to move away from some of its 1960s computer systems and reliance on fax machines and paper documents. The need to work remotely has led the IRS to steadily reduce the list of items that require fax and increase email and telephone administration. According to the IRS, around 85% of filings are made online, with only certain administrative tasks requiring other forms of interaction.

The IRS works closely with a consortium of third-party software developers called the Free File Alliance to provide both free and paid-for filing products. There is legislation in place that prevents the IRS from undercutting these offerings by providing its own electronic filing services.

CHALLENGES

The IRS's budget, historically low in comparison to the volume of taxes it has to administer and collect, remains under pressure, making longer-term planning and modernisation programmes more challenging. The authority's budget and resources change each year as the appropriations process shifts in line with political changes, making certainty hard to come by. Furthermore, the authority is restricted in how it can innovate on its own, having essentially lost its ability to produce its own digital filing system due to restrictions on competing with the third-party suppliers it works with. This restricts the IRS from providing downloadable data, pre-populated forms and more. Strong lobbying from tax filing companies opposes these improvements whenever they are suggested. There are also anti-government sentiments that oppose any increase in the information available to the IRS. But the IRS is around a year behind in processing paper returns – still used by tens of millions of Americans – leading to delays and costs for all involved.

The prevalence of tax-centric identity theft and scams has rightly made the IRS cautious when identifying taxpayers. However, over-caution has further held back attempts to increase, for example, email-based administration, with some interviewees noting that they had to send staff into offices during the COVID-19 lockdowns solely to collect IRS correspondence. The IRS has also suffered from high levels of false positives when attempting to confront potential fraud. For example, one study of child tax credit issues flagged by the IRS found that 55% were incorrectly flagged, and as many as 41% of the remainder might also be. This low accuracy rate is frustrating for honest taxpayers and wastes effort throughout the system.

CONCLUSION

Without reliable, multi-year support for modernisation and the ability to truly innovate with its own digital offerings, the IRS is in a difficult position. While the COVID-19 pandemic has finally seen the back of some of the oldest computer systems in the US government, true tax transformation and efficiency is still some way off. Until there is a change in how the IRS is funded and run, and the renegotiation of its relationship with third-party software suppliers, this is unlikely to change.

Caution is well warranted with the US's system of universal filing. Due to low digital data collection and basic estimation, most taxpayers are in line to receive rebates – so incentivising fraudsters to misappropriate those rebates. But the processes in place to detect that fraud have also resulted in many false positives, creating hurdles and extra work for legitimate taxpayers. Effort needs to be made to lower the false positive rate, without allowing fraudulent claims to go unnoticed.

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Wanqing Tan

We are grateful to all that gave their time to us.

Chartered accountants are talented, ethical and committed professionals. There are more than 1.8m chartered accountants and students in the world, and more than 187,800 of them are members and students of ICAEW. All of the top 100 global brands employ chartered accountants.*

Founded in 1880, ICAEW has a long history of serving the public interest and we continue to work with governments, regulators and business leaders globally. And, as a world-leading improvement regulator, we supervise and monitor over 12,000 firms, holding them, and all ICAEW members and students, to the highest standards of professional competency and conduct.

We promote inclusivity, diversity and fairness and we give talented professionals the skills and values they need to build resilient businesses, economies and societies, while ensuring our planet's resources are managed sustainably.

ICAEW is the first major professional body to be carbon neutral, demonstrating our commitment to tackle climate change and supporting UN Sustainable Development Goal 13.

We are proud to be a founding member of Chartered Accountants Worldwide, a network of 750,000 members across 190 countries which promotes the expertise and skills of chartered accountants around the world.

We believe that chartered accountancy can be a force for positive change. By sharing our insight, expertise and understanding we can help to create sustainable economies and a better future for all.

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* Source: CAW, 2020 – Interbrand, Best Global Brands 2019