

# The new digital revenue agency: Seven keys to streamlined tax administration

Deloitte Center for Government Insights

*Seven strategies that can help revenue agencies  
navigate the digital revolution*





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# Introduction

**R**evenue agencies worldwide are at a pivotal juncture. Many traditional methods of tax administration are being upended by the transformative power of digital platforms, artificial intelligence, and generative AI.

The external environment is creating pressure for change. Demands for service are escalating. Technology is shifting. Cyber threats are increasing. And new forms of currency and business practices are creating a driving force for transformation. Amidst this sea of change, revenue agencies are being asked to deliver high levels of service today while reengineering operations to help address the tax gap, reduce risks for taxpayers, and maintain public trust.

In 2020, Deloitte released “[The revenue agency of the future: Seven keys to digital transformation](#).” While the insights shared in that paper are still relevant, much has changed in the past five years, prompting the question: What are the seven keys to transformation today? What strategies will take revenue agencies to 2030, 2035, and beyond?

In this report, we have identified seven keys that can help revenue agencies effectively navigate this new digital landscape. Adopting these can help agencies stay agile, efficient, and responsive to everyone involved—revenue agency leaders, individual taxpayers, businesses, and the broader economic environment.

## Key 1: Being digital in the era of AI

The concept of “being digital” has moved beyond the mere digitization of paper processes. Today, many revenue agencies are seeking to integrate end-to-end digital workflows enhanced with AI to embed compliance by design and achieve frictionless service delivery. The Organisation for Economic Co-operation and Development’s (OECD) Tax Administration 3.0 vision of a future where “tax just happens” underscores the necessity of this transformation, advocating for a model of tax administration that leverages technology to embed compliance and transform the taxpaying experience. Today, those technologies include AI and gen AI, which are emerging as mission-critical capabilities.

## Key 2: Using data as a strategic asset

Revenue agencies are custodians of vast amounts of data, which present both opportunities and challenges. Effective data utilization is often crucial for decision-making, fraud detection, and enhancing customer service. To meet this need, agencies should ensure their data is accurate, accessible, and actionable. In addition, agencies are finding ways to establish mechanisms to curate their data, facilitating stewardship and effective utilization.

### **Key 3: Evolving the workforce**

A successful revenue agency in the future will have a workforce that includes professionals skilled in one or more of the following areas: data science, tax administration, finance, and technology. Hiring people who excel at everything, however, is not a sustainable (or affordable) staffing strategy. Agencies should develop an operating model that brings these complementary capabilities together.

### **Key 4: Elevating the taxpayer experience**

Taxpayers generally expect a tailored, streamlined experience. Revenue agencies can draw inspiration from customer-centric industries like travel and retail to design personalized interactions. This includes incorporating technology to meet people where they are in terms of technical fluency.

### **Key 5: Embracing agility to meet new missions**

Revenue agencies should remain agile to respond to domestic and global policy changes, new digital economies, and rising taxpayer demands. The COVID-19 pandemic highlighted the necessity of rapid adaptability, with agencies worldwide expanding their roles beyond<sup>1</sup> collecting taxes to also dispensing economic relief. This experience underscores the importance of readiness, enabling agencies to adapt quickly and effectively manage future disruptions by embracing agile strategies.

### **Key 6: Expand tax ecosystem engagement**

The successful tax agency of the future should redefine its connections within the tax ecosystem. This means fostering robust relationships within a redefined ecosystem that includes financial institutions, software developers, and payment platforms. By strengthening connections with industry leaders, agencies can anticipate emerging issues, streamline compliance, evolve industry-developed solutions, and enhance the taxpayer experience.

### **Key 7: Combatting emerging threats and synthetic tax fraud**

As any organization digitizes, they increasingly become prime targets for sophisticated cybercriminals. Synthetic identity fraud, where criminals combine pieces of real personal information with fake data to create a new identity, poses significant risks to revenue agencies. Strengthening cybersecurity should involve a holistic approach, integrating actions across information technology, tax policy, infrastructure resilience, and compliance.



# Key 1: Being digital in the era of AI

What it means to 'be digital' has evolved. Simply replacing paper processes with digital ones is no longer enough. Revenue agencies should consider embracing genuinely digital processes and workflows enhanced with AI to change the way they work.

**R**evenue agencies that have yet to embrace end-to-end digital processes risk falling behind. The OECD's ambitious Tax Administration 3.0 vision would integrate taxation into daily transactions so tax collection occurs smoothly in the flow of commerce.<sup>2</sup> Consistent with this vision, digital transformation to the core would entail "a different model of tax administration," one that not only uses digital processes but also leverages AI and gen AI to embed compliance as the likely default outcome and deliver previously unattainable levels of seamless and frictionless service.<sup>3</sup>

## Balancing transformation and operations

The rapid technological advances in the past two decades have created challenges for revenue agencies. Agencies have to keep the business running while also devoting precious resources to transformation. This may result in incremental improvements that leave the agency falling further behind and working harder to patch up outdated systems, rather than leveraging newer technologies. Assuming resources are available, parallel development could be an option. However, outdated thinking and decision-making can hinder a commitment to scaling up new platforms.

One of the key advantages of digital systems is their adaptability. This was illustrated during the pandemic when agencies that had already digitized were better equipped to handle the sudden changes to their workflows.

## The transformative power of AI

AI is perhaps the most transformative technology since the internet. It is not a technology of the future; it is a technology well on its way to transforming the revenue function today. Heads of revenue agencies are no longer being asked *if* they are using AI but *how* they are using AI.

Generative AI, the latest technology to emerge on the scene, is also having an immediate impact on revenue agencies worldwide. As government agencies accelerate their adoption to match that of the industry, this technology could play a crucial role in many aspects of tax administration. The public sector has been slower to adopt gen AI than the private sector (figure 1), which gives them an opportunity to learn from the industry in creating their own AI road maps.<sup>4</sup>

## Benefits and challenges to AI adoption

The potential of AI and gen AI is immense. These new technologies introduce new challenges, especially in terms of privacy and security. For that reason, agency officials sometimes view gen AI as a tool best deployed internally for the time being, carefully applied to solve discrete problems within the organization. Even with limited deployment, AI has the potential to significantly improve efficiencies in revenue agencies. In the longer term, taxpayer-facing applications could similarly add substantial benefits. Agencies should consider developing strategies to enable the responsible use of AI, which can help to reduce risk, covering areas including data-sharing and interoperability, the transparent and ethical use of gen AI, and the development of a tech stack with the necessary computing power. Agencies will need to find a balance; conservative adoption manages risks and serves the mission but often fails to keep pace with taxpayer and stakeholder expectations.

Beyond traditional or gen AI, agentic AI is an emerging, more sophisticated form of AI that could reach beyond current applications of this technology. Agentic AI systems have the potential to learn continuously, make goal-directed decisions, and operate semi-autonomously to expand collaborations between humans and machines. As revenue agencies consider the future, this exciting new form could create a range of opportunities, from call centers to help desks, and anywhere employees and taxpayers require assistance.

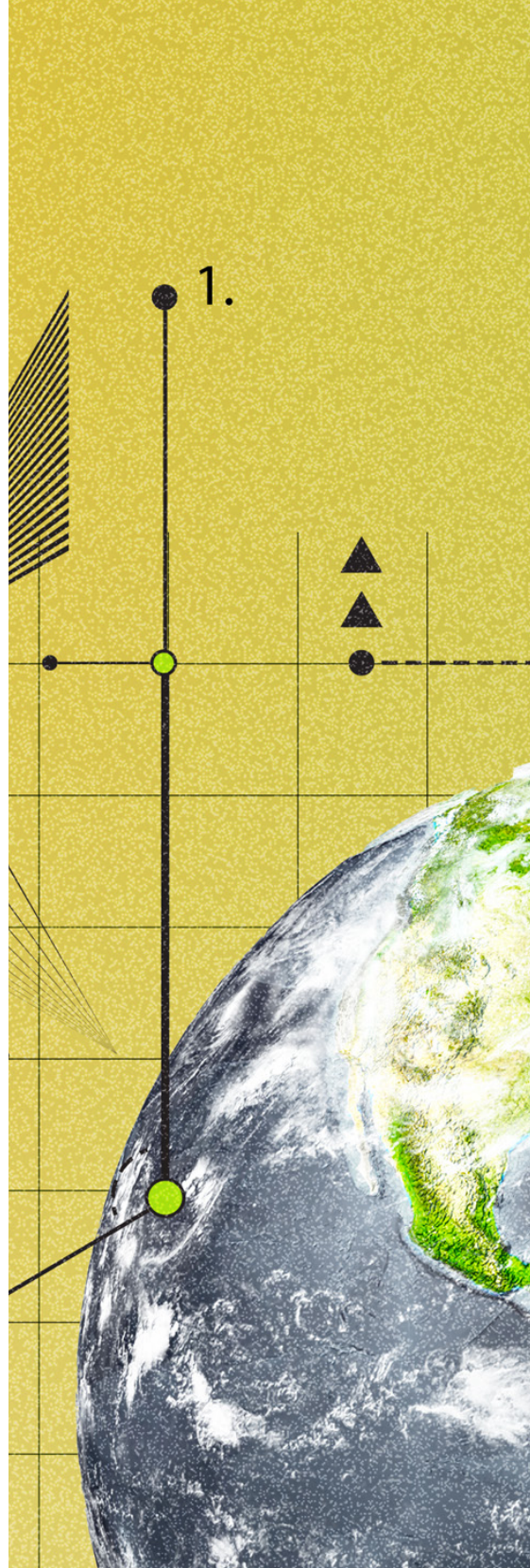
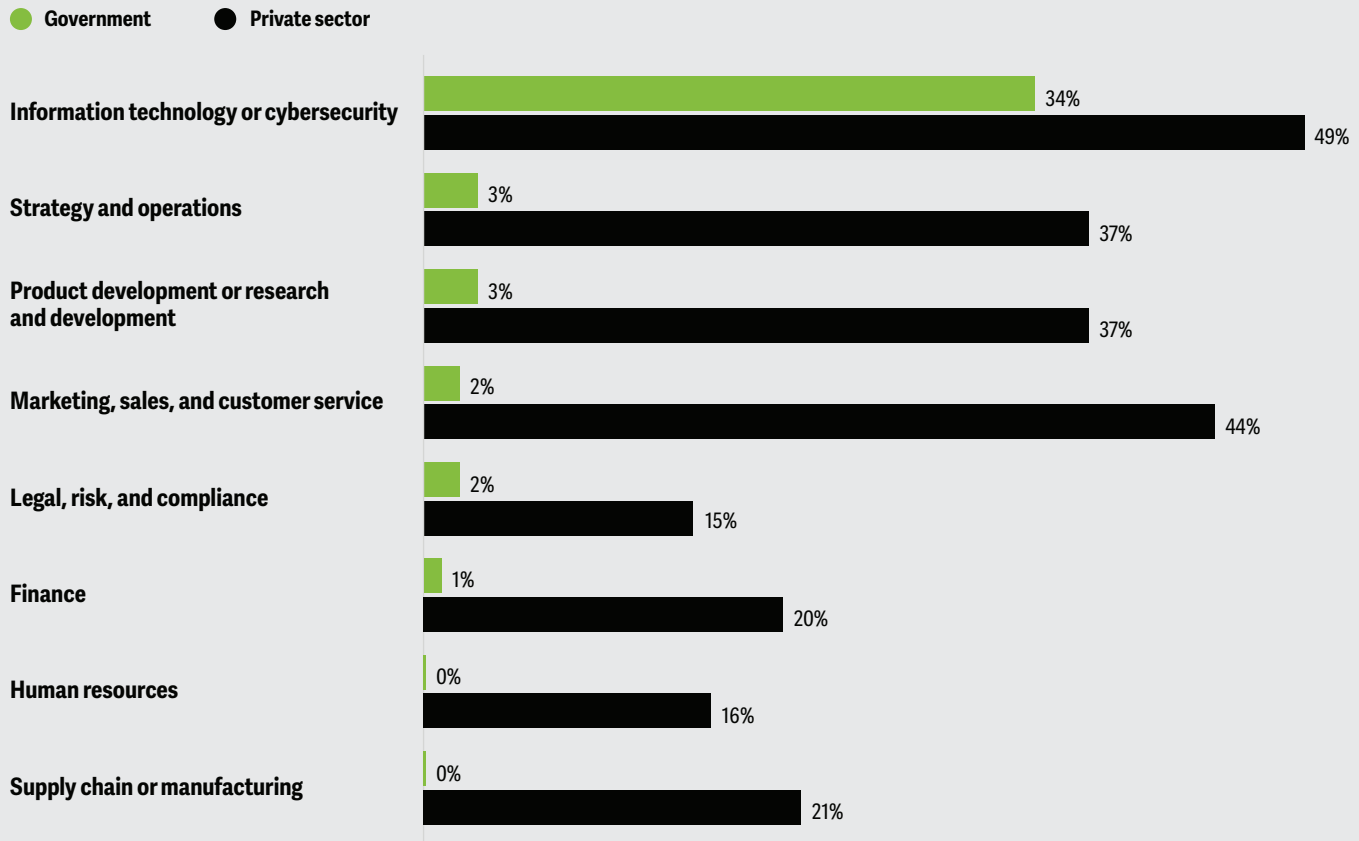


Figure 1

## Public sector adoption of generative AI has been less prevalent than the private sector in a number of functional areas



Source: Deloitte's State of Generative AI in the Enterprise, Q3 report, 2024.

### The human side of digital transformation

Revenue agencies that embrace AI and unlock its powers may be better able to maneuver through unknown future obstacles. Terms like digital transformation, AI, and gen AI often evoke thoughts of highly technical challenges. However, becoming digital is equally about the “soft” structures within an organization. While “hard” assets

such as computing power, data platforms, and storage are important, the cultural aspects of change management can make a big difference. The support of agency employees can be the deciding factor between success and failure. Addressing issues like appropriate governance structures, training, and effective communication can help prepare an agency for future challenges.



## Key 2: Using data as a strategic asset

For revenue agencies, data has always been a valuable asset, but it is also potentially their greatest burden. The desire to fully unlock the power of data is strong, yet it has proven challenging. With the increasing volume of data, the advent of AI, and the enhanced capability to leverage unstructured data, it's become increasingly important to address data management.

**R**evenue agencies should consider intensifying their efforts to enhance their data capabilities. Not only is the volume of data increasing exponentially, but it also serves as the “fuel” that drives AI. To support these advancements, agencies should strengthen their data infrastructure as a foundation for future success.

Revenue agencies have long recognized the importance of data but have often struggled to unlock its full potential for various reasons. They have dealt with legacy systems, legal complexities that limit data sharing, and organizational silos. Additionally, many find it difficult to retain skilled programmers and data scientists.<sup>5</sup> As a result, many revenue agencies have sub-optimal data infrastructure.

Better data management is important to organizational improvements. Effective revenue operations call for the ability to access the right data at the right time. A 360-degree view of individual taxpayers can enable significant leaps in service and help limit fraud and non-compliance. If data was important 10 years ago—and it was—it is expected to be essential in the coming years.

The elements of a top-notch data environment are well known. Data needs to be accurate, timely, and broadly available for use throughout the agency in real- or near real-time. When this kind of data is placed on modern infrastructures, AI tools can transform dormant data into useful information for decision-making.

Without a solid foundation of reliable data, the most dazzling technologies can be ineffective. With reliable data, so much is possible.

For example, the Australian Taxation Office uses AI-based methods to help individual taxpayers fill in their online forms accurately by comparing their responses with those of similar users. When the model detects an outlier, it prompts the taxpayer of possible errors in real time using a pop-up box.<sup>6</sup> This preventative approach, also used by tax authorities in Norway<sup>7</sup> and Denmark,<sup>8</sup> helps filers avoid errors while subtly signaling that entries are subject to rigorous controls—a win-win for both the filer and the agency.<sup>9</sup> This sort of enhancement can only be accomplished by sharing key data at scale.

### The coming tidal wave of data

To demonstrate the exponential volume of data created by the digital economy, there is no better example than digital assets. Digital assets such as cryptocurrencies and nonfungible tokens present a new set of data challenges for revenue agencies. These novel assets are evolving fast and growing in popularity. These digital transactions are often rapid, take place in a “borderless” online realm, and are difficult for authorities to trace. According to a report by the US Treasury Inspector General for Tax Administration, between 2019 and 2021, the number of Americans who reported transacting in digital assets grew by 649%.<sup>10</sup> The US IRS estimates they will take in close to 8 billion digital asset forms each year.<sup>11</sup> However, its use beyond investing is still nascent.

These transactions produce complex forms of data that agencies need to understand to perform audits and investigations. Revenue agencies are faced with the complexities of unwinding information from both parties executing these transactions and determining the correct level of taxation. Obtaining information to verify the cost basis and fair market value of these digital assets can be challenging. Each country has different tax and reporting requirements for digital assets, but many have committed to implementing the OECD Crypto Asset Reporting Framework, which aims to enable the automatic sharing of information on digital assets between tax authorities.<sup>12</sup>

However, digital assets will not be the last new tech that creates new transactions, new data, and new regulations at scale. Data is the lynchpin of many future capabilities. The ability to handle data can drive cost-reducing efficiencies, enhance the customer experience, and reduce errors. Data is central to success moving forward, as the current data capabilities of most revenue agencies are simply not up to the task. The precise path moving forward will vary from agency to agency and will require financial commitment and the attention of public leaders. Agencies that fail to improve their data infrastructure risk falling short in executing their mission.



## Key 3: Evolving the workforce

Ideally, the workforce of a revenue agency is not made up of individuals with singular skills, but rather have a combination of capabilities across data science, tax administration, finance, and technology. Agencies can design operating models that bring complementary skills together to amplify the impact of each employee.

**R**evenue agencies are highly reliant on a capable workforce. Interestingly, as the use of technology increases, the workforce requires more critical skills. Data processing is increasingly handled through technology, but the accelerating pace of technology, tax law, and business practice change increases the need for critical thinking and complex problem-solving, all of which remain primarily human-centered capabilities.

Constant tech innovation, specifically AI, is shifting the mix of skills that revenue agencies need to manage and evolve. Digital transformation efforts, including the integration of AI, are quickly shifting organizations to a “human in the loop” approach where technology can support workers and the skills they need to leverage new capabilities.

While traditionally, there may have been sharp boundaries between an organization’s “business” and “technology” sides, these boundaries are now often being blurred. In the past, revenue agencies had separately sought out workers with particular domain knowledge such as accounting, tax policy, data analytics, or IT. But now, revenue agencies are increasingly seeking workers who can do “all of the above” and bring a mix of financial acumen and technical know-how.

Hiring people who excel at everything, however, is not a sustainable (or affordable) staffing strategy. An alternative is to deliberately pair individuals with different but complementary skills, for example, tax policy experts and data scientists, and assign them critical shared goals. Intentional organizational design can bring together varied abilities so that integration happens naturally through the workflow. Some elements of operations

have evolved faster than others, but collaboration can help business processes stay modern and relevant for the technologies in use.

In addition to specific skills, agencies can prioritize integrative thinking as part of the hiring process, especially for management levels. These leaders do not have to be experts at everything but should represent a variety of perspectives in problem-solving.

Strategies deployed to address the skills gap may include:

- Streamlining the hiring life cycle
- Improving retention by investing in upskilling

- Addressing systemic integration barriers in current operating models and organizational designs
- Expanding the talent aperture by considering nontraditional hires, non-degreed workers, or retired policy subject matter experts
- Considering contractors, consultants, and partnerships with universities and nonprofits

The future workforce, rather than being a collection of expertise silos, is expected to be a set of complementary puzzle pieces. Embracing workforce strategies that promote integration should remain a high priority as agencies enhance their operations to improve outcomes.

## Key 4: Elevating the taxpayer experience

New technologies make it possible to deliver a more seamless taxpayer experience. Taking a cue from leading organizations in the private sector, revenue agencies could leverage technology to deliver excellent service at low cost.

**T**axpayers have grown accustomed to the seamless services offered by leading private sector companies, often allowing for reduced paperwork, increased processing speeds, and shorter waits. However, fulfilling these baseline expectations alone may not be sufficient. Taxpayers also want to be confident that they have been treated fairly, which means that taxes should be transparent and easily understood. Ease and speed are critical, but they are not enough.

Taxpayer satisfaction is an important driver of improved compliance, reduced costs, and enhanced trust.

The good news is that low-cost digital services, when done well, can provide high levels of satisfaction. Deloitte's Digital Government and Citizen Experience survey of 2023 found a preference for interacting with the government through websites, albeit preferences varied with age (figure 2).<sup>13</sup>

A positive taxpayer experience is important to the success of revenue agencies. Digital filing is a start, but the ideal state—as set out in the OECD's Tax Administration 3.0 vision—is for taxes to occur seamlessly as taxpayers go about their business.



## Moving toward more efficient tax processes

This future is already a reality in some places.

Taxpayers in several countries have long enjoyed access to digital filing, including prefilled personal income tax returns. These prefilled forms include wage data from payroll systems and other timely third-party data. Prefilled forms require less effort from the taxpayer and are typically more accurate.<sup>14</sup>

The National Tax Service (NTS), South Korea's revenue agency, has steadily made progress in streamlining the income tax process for residents. For years, the NTS has collected information with tax implications for wage earners, relieving individuals of that burden. As a result, to file their taxes, many Korean taxpayers simply need to verify a few key pieces of data, including deductions and credits. This has significantly reduced the number of interactions with the NTS, in turn reducing much of the friction from the taxation process.<sup>15</sup>

**The OECD reports that the percentage of tax administrations that provide at least some prefilled data on personal income tax returns increased from roughly 79% to 88% between 2018 and 2022, with countries including Argentina, Romania, and Thailand recently adding this feature. The universe of prefilled data can include taxpayer information, wage and salary data, dividends and interest, and more. According to the OECD: "Advances in rules-based technologies, information-reporting requirements, and the application of data science techniques mean that the approach can now be considered more widely."<sup>16</sup>**

Seamless "pay as you earn" processes, which function as a more sophisticated type of tax withholdings of wages, are being adopted as well. Tax authorities are incorporating new data sources and enhancing their understanding of tax liability, including information reflecting income from nontraditional sources such as ride-sharing or other gig economy platforms.<sup>17</sup>

## Balancing technology and human interaction

However, not all tax interactions can be made entirely seamless, and customer service mechanisms of all kinds— websites, call centers, chatbots, and more—are important features of leading customer service. Accurate answers to questions and access to needed information can help foster trust. In these instances, technology can help, but it needs to go hand in hand with strong professional empathy—the key to a productive relationship with taxpayers.

In Singapore, the aspiration of government service is "digital to the core, serves with heart."<sup>18</sup> Even taxpayers involved in high-stakes interactions like audits or administrative dissolution of their business can emerge with improved trust in the tax authority if they receive clear guidance.

Tax authorities seeking to deliver an excellent taxpayer experience should incorporate the perspectives of taxpayers and other stakeholders of the tax ecosystem. This includes taking an "outside-in" view of service and using human-centered design on processes. Service excellence is important for efficient revenue collection.

## Ensuring digital access

But what about those individuals who may, for various reasons, have challenges interacting through technology? Over the last decade, tax authorities have largely succeeded in shifting taxpayers from walk-in offices and paper forms to interacting through digital channels, including websites, apps, and chatbots. The challenge now is ensuring that those interactions are orchestrated efficiently. More intuitive and mobile-friendly design, along with simplified language and tailored content, can help reduce the frustration of taxpayers and enhance compliance.

Increasingly, agencies are focusing on providing additional resources to taxpayers. This commitment is reflected in features such as screen readers, text enlargement, and high-contrast modes for visually impaired users.

The Danish tax authority website, for instance, has recently introduced a feature to read content aloud, adhering to Denmark's whole-of-government web content accessibility guidelines.<sup>19</sup>

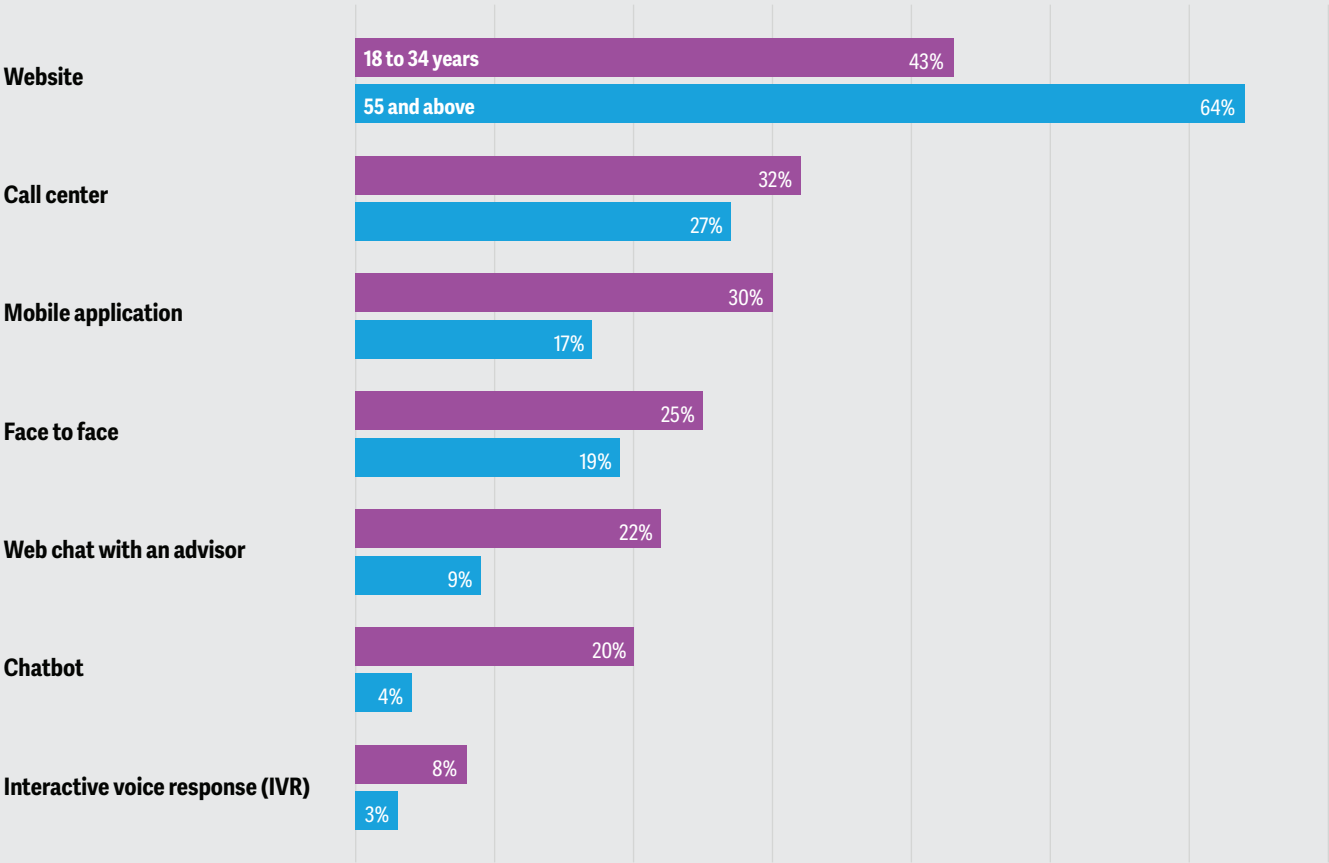
A particular accessibility challenge in an increasingly globalized world is language. Today, it is rare to find

a tax authority website that does not include multiple language options. The IRS website in the United States, for instance, offers eight language options. The IRS has also started translating forms and has introduced a translation tool, the Taxpayer Accessibility Program Machine, to augment staff as they serve taxpayers with different linguistic needs.<sup>20</sup>

Figure 2

**Respondents prefer services to be offered digitally**

*Preferred mode of interaction with government services, by age*



Source: Deloitte Digital Citizen survey, April 2023.

### Future innovations in taxpayer services

Text and speech technologies—including natural language processing, gen AI, and conversational AI—combined with rich data from taxpayer interactions are expected to transform services. Tax authorities are increasingly using customer interaction data to forecast service demand. For example, the Australian Taxation Office uses machine learning to complement traditional forecasting methods.<sup>21</sup> Other applications for service enhancements include automating routine interactions and process steps, tailoring services based on prior interactions, and providing service staff with augmented data.

Tax authorities should generally strive to reduce service demand as much as possible, with routine taxation occurring seamlessly and without incident. The catchphrase of Singapore’s Inland Revenue Authority captures this aspiration well: “No need for service is the best service.”<sup>22</sup>

Tax authorities can use AI to build a deeper understanding of why taxpayers contact the agency for service and take steps to proactively tackle these drivers of demand. Reducing the need for service—especially problem resolution—should be a goal of continuous improvement efforts.

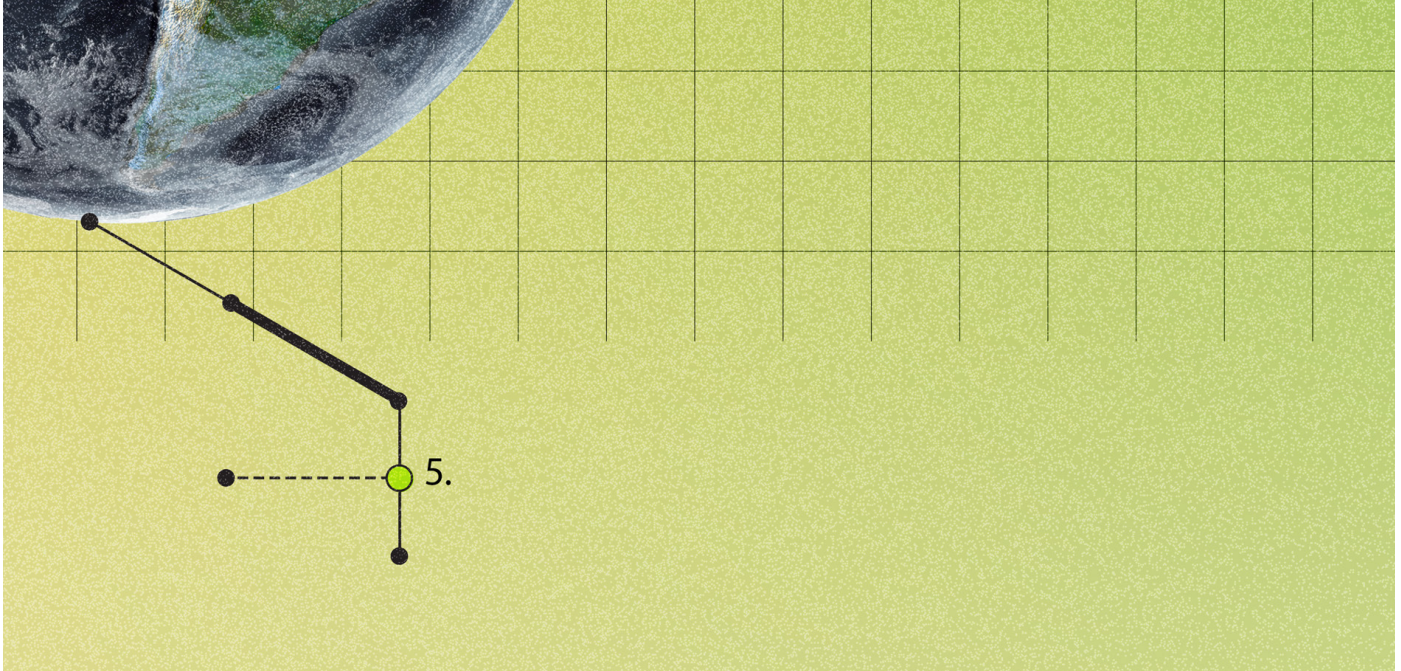


## Key 5: Embracing agility to meet new missions

The adage ‘expect the unexpected’ is highly relevant for revenue agencies dealing with disruptive change. Rapid changes demand agile responses. The pandemic demanded organizational resilience and agility and is a prime example of the ‘unexpected.’

**P**lanning for the future is important, but at the same time, revenue agencies, just like all organizations, need to be prepared for surprises. It’s important for revenue agencies to be poised to react to changes outside of their control, including:

- New mandates that could require revenue agencies to quickly pivot to dispense economic assistance
- New technologies, including sophisticated cyber threats, that leverage gen AI
- New business practices, like cryptocurrency and trading in nonfungible tokens, which require new reporting, collection, and enforcement mechanisms
- Changing expectations, with taxpayers expecting contemporary digital services, convenient options, and expedient processes
- A changing threat landscape, including the emergence of crime factories, state-backed hacking, and fraud-as-a-service



No amount of planning can foresee all possible contingencies, which is why organizational resilience—the ability to respond quickly to change—is essential.

Perhaps nothing illustrated this better than the response to the pandemic. Across the globe, the role of revenue agencies expanded from tax collector to include benefit provision.<sup>23</sup>

Governments’ pandemic relief measures required difficult trade-offs between implementation pace and risk considerations, with agencies having to keep normal operations running while enabling extraordinary execution. In the United Kingdom, a relief program allowed companies to furlough their employees with a government grant covering much of their wages. Getting these funds out quickly was critical.<sup>24</sup> At the same time, it was important to ensure that funds were only going to the intended recipients. A recent His Majesty’s Revenue and Customs (HMRC) report analyzing the effectiveness of the furlough plan found that fraud was limited, noting that: “HMRC’s prepayment controls have been effective, with the amount lost to organized crime and criminal attacks being significantly lower than anticipated.”<sup>25</sup>

In this case, extraordinary circumstances required agencies around the world to take extraordinary measures. However, these types of shifts, even in less extreme situations, can force a focus on the new priority, which can significantly disrupt normal flow. The pandemic highlighted that agility and scenario-based planning should be considered an imperative.

The risk of changing processes and technology is high; but as the pandemic showed, it is not insurmountable. And while the pandemic was an extreme event, regulatory, technology, and other circumstantial disruptions occur with some frequency, underscoring the importance of agility and readiness. Indeed, the OECD Tax Policy Reforms 2024 report describes the “complex terrain” of ongoing and expanding policy changes revenue agencies will face in the future.<sup>26</sup>

This includes shifting tax rates, ongoing pandemic relief measures, adjusting value-added taxes to encourage sustainability or health, tax credits that promote electric vehicle sales and a transition to green energy, and new global economic realities such as digital assets and global minimum tax. Responding to change is difficult, but internal investments can be made to enable resilience within large government bureaucracies.

Scenario-planning or wargaming could be very helpful. The practice is routine in the military but less common for civilian government branches, as it tends to be expensive and labor-intensive.<sup>27</sup> Gen AI and digital twinning have the potential to dramatically reduce the cost and risks associated with scenario planning while granting revenue agencies the same benefits: creating recommendations for the future and revealing critical gaps in capacity.



## Key 6: Expand tax ecosystem engagement

OECD's Tax Administration 3.0 vision prompts revenue agencies to redefine their role by adopting a more systemic view of the technologies, processes, and actors involved in tax compliance. This approach will require revenue agencies to find effective ways of engaging with stakeholders in a complex and evolving digital ecosystem.

**R**evenue agencies have a long tradition of engaging with the accounting profession, industry associations, the software industry, financial institutions, and other stakeholders. The purpose of these engagements can range from seeking input and feedback—for example, on existing pain points or on the design and rollout of new policies and services—to fostering collaboration.

In the past decade, user-centricity and collaborative approaches, including co-creation, have become increasingly prevalent, leading to deeper relationships between parties. Many revenue agencies have developed formalized mechanisms for collaboration, including in the design and delivery of service or compliance activities. For instance, HMRC in the United Kingdom has long collaborated with the accounting profession to design and deliver information and guidance to a large segment of small businesses. It is well-established that such relationships bring benefits to all parties involved.<sup>28</sup>

The increasing digitalization of the tax ecosystem has made it clearer still that tax agencies are part of a digital ecosystem where services and solutions offered by third parties can substantially impact tax outcomes and the taxpaying experience. Leading revenue agencies recognize the need to collaborate with the software industry, which is reflected in the widespread practice of providing application programming interfaces (APIs) that enable third parties to develop services transacting with tax authority systems. This approach effectively integrates tax administration processes with natural processes while outsourcing the design and build of user interfaces.

The Australian Taxation Office, Inland Revenue of Singapore, and HMRC in the United Kingdom are examples of revenue agencies that have leveraged APIs to enable collaboration with the tax ecosystem. This approach helps embed compliance as a more likely default outcome and improves the taxpaying experience. Similarly, prefilling services for tax agents and return preparers in Canada and the United States are variations of the same theme.

OECD's Tax Administration 3.0 vision of “tax just happens” as a result of natural processes has raised the stakes further. To build on or integrate with natural processes, revenue agencies must understand these “natural processes” (for example, payment, invoicing, sales documentation, bookkeeping, payroll, and tax) and find effective ways of engaging with those who own and control them. This challenges revenue agencies to take the ecosystem play to a different level where, ultimately, the tax administration operating model needs to reflect the complex and evolving ecosystem in which it is operating.

One approach to achieving this can be by building new platforms for ecosystem actors to work toward a common vision of the future. This is the intent of the Real-Time Economy project in Finland. In this project, the Finnish Tax Authority works with other public and private stakeholders to build a national digital ecosystem for businesses.

This ecosystem allows for the seamless, real-time, and secure transmission of orders, e-invoices, digital sales receipts, and business information between corporations

of all sizes. Additionally, it aims to be interoperable with similar systems in other Nordic countries.<sup>29</sup>

The Finnish Tax Administration processes approximately 1.5 billion transactions annually using automated decision-making.<sup>30</sup>

In a sign of a step change from past engagement efforts, some revenue agencies have introduced new strategies, functions, and roles to support ecosystem engagement. Inland Revenue in New Zealand, for instance, has introduced a digital ecosystem engagement strategy,

which, in addition to a dedicated team led by a senior executive, is supported by an advisory group of industry representatives.<sup>31</sup>

These developments have far-reaching implications, as a vision of revenue agencies as part of complex and evolving digital ecosystems challenges revenue agencies to reimagine their operating models and architectures. It is unclear what exact shape the tax agency of the future will take, but its ability to proactively and consistently engage with stakeholders in the tax ecosystem will likely be critical to its success.

## Key 7: Combatting emerging threats and synthetic tax fraud

New technologies have given rise to novel threats. Sophisticated criminals use various tools to create synthetic identities, industrialize fraud, or otherwise compromise the integrity of the tax system.

**T**he threat landscape for tax authorities is changing dramatically. Sophisticated tools are being used to jeopardize both funds and tax filers' data. Therefore, embedding resilience and enhancing the ability to fend off known or emerging risks becomes a key concern for tax authorities.

The changing threat landscape includes ever more capable and well-resourced adversaries with a greater ability to disguise themselves, including by coopting or infiltrating other organizations. The professionalization of cybercrime and the proliferation of nation state-backed hacking are dramatically changing the risk picture. The growth in cybercrime has created a support system for criminals, including a marketplace where they can

purchase stolen identities. Cheap access to powerful technologies, including gen AI, means that there is a very low barrier to entry to leverage information bought on the web and found on social media to penetrate organizational defenses. Synthetic identity fraud often mixes real and fabricated information to deceive agencies. Innovative new forms of synthetic identity fraud risks can be amplified by technology.

These threats are not science fiction from the future; they are reality. In July 2023, the US Social Security Administration briefed Congress on how an AI-powered "chatbot" had successfully impersonated a beneficiary and convinced a call service representative to redirect the monthly benefit payments to a different account.<sup>32</sup> Similar attacks on tax authorities are easily conceivable.



**"A traditional 'pay and chase' approach will not cut it. These risks run across policy, compliance, enforcement, cyber and infrastructure. They are also often influenced by third parties. Tax authorities need to think of more holistic and joined up ways of managing them. The ideal is designing them out altogether."**

**—Simon York  
(former head  
of serious  
fraud with HM  
Revenue &  
Customs, United  
Kingdom)**

One of the most troubling examples of a large-scale tax refund fraud is the European cum-ex fraud, first uncovered in 2017. This massive scam—which cost taxpayers upward of 55 billion euros—exposed the vulnerabilities of a system with no or limited control data. It involved lawyers, brokers, bankers, and institutional investors acting in concert to create the illusion that they or their clients were entitled to refunds for dividend taxes that were never paid in the first place—sometimes for shares that didn't even exist.<sup>33</sup>

With social media, even a relatively unsophisticated scheme can scale quickly. An Australian GST (goods and services tax) refund fraud started with influencers promoting a simple scheme—setting up a business and claiming a GST credit—as a way of getting a government “grant” or “loan.” The fraud, which in some cases relied on identity data bought on the dark web, spread so quickly that AU\$1.2 billion (US\$633 million) was out the door by the time authorities caught wind of it. Subsequent actions were able to prevent additional losses of AU\$2.7 billion, but with at least 57,000 people involved and losses estimated at AU\$2 billion, this is still the largest tax fraud in Australian history.<sup>34</sup>

These are just examples of what this changing threat landscape looks like and how it is affecting tax authorities. The financial crime ecosystem is complex (figure 3).<sup>35</sup> They illustrate the severity of the risks (even if we leave aside the non-fiscal aspects) and the difficulties in containing the damage once the risks materialize.

Revenue agencies will increasingly need to embed resilience and cybersecurity in every aspect of the tax system. This may include strengthening controls, improving intelligence, enhancing collaboration between all actors involved in managing the risks, and reconsidering trade-offs between risk appetite and other priorities like improving the taxpaying experience, reducing administrative burdens, or implementing policies at pace. This brings risk and resilience right to the forefront of the digital transformation agenda.

### **The road ahead for revenue agencies**

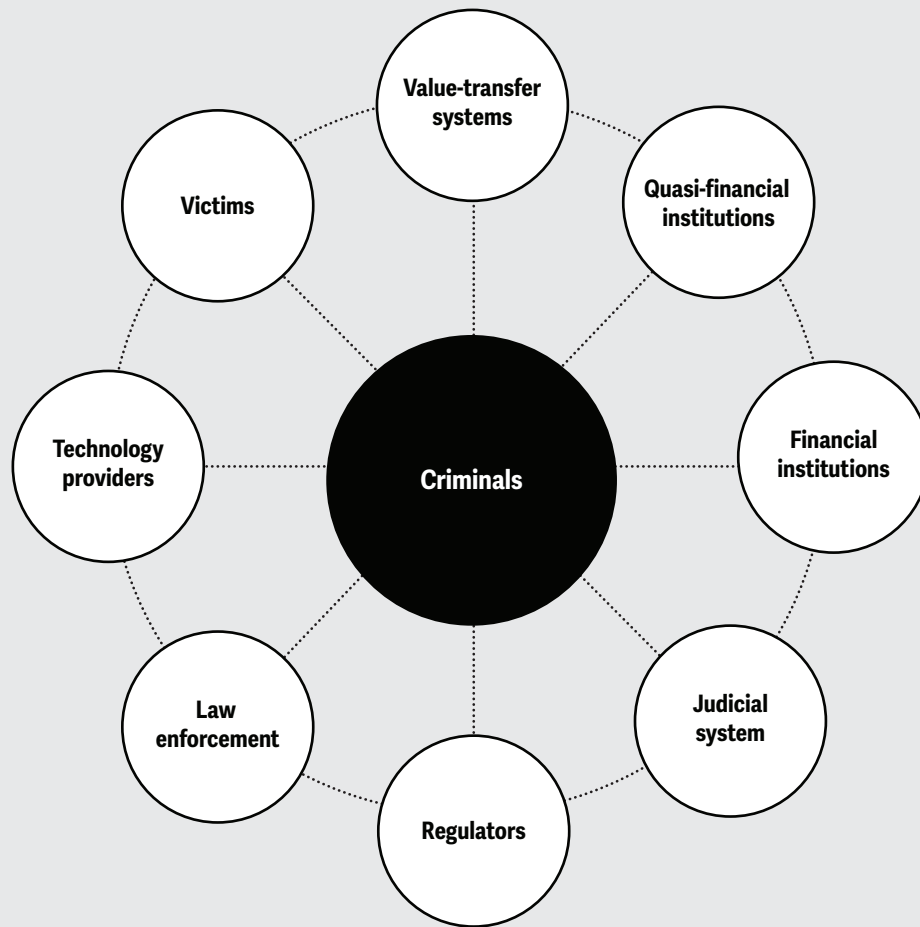
Revenue agencies have a crucial mission, and they must execute on this mission during a time of rapid change. The job of bringing in the revenue needed for the operation of government can't be shelved while an agency reorganizes. The continuous onslaught of change—including technical advancements, economic fluctuations, and increasing expectations of service levels—has to be dealt with even while the agency fulfills its mission.

But while the current environment presents daunting challenges, it also offers tremendous opportunity. Advances in digital, AI, and data analytics provide powerful new tools as agencies seek to fulfill their mission in the most efficient manner possible, providing outstanding customer service while reducing waste and fraud. As public leaders progress toward the future, a focus on the seven keys identified above can be critical factors for success on the road ahead.

Figure 3

## Technological developments like digital assets, AI, and advanced analytics put more actors at risk for financial crime

*The expanding network of participants in financial crime*



Source: Deloitte analysis.

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# Endnotes

1. Shawna Chen, “Treasury: Over 156 million stimulus payments sent out since March,” *Axios Media*, April 7, 2021.
2. Organisation for Economic Co-operation and Development, “Tax administration 3.0: The digital transformation of tax administration,” Dec. 8, 2020.
3. Ibid.
4. Joe Mariani, Pankaj Kishnani, and Ahmed Alibage, “Government’s less trodden path to scaling generative AI,” *Deloitte Insights*, Oct. 24, 2024.
5. Amrita Datar, J. R. Ruiz, John O’Leary, Sushumna Agarwal, and Roopa Sanwardeker, “Government can win the talent race—Here’s how,” *Deloitte Insights*, May 23, 2022.
6. Australian Government, Australian Taxation Office, “How we use data and analytics,” Aug. 12, 2024.
7. Anne-Lise Breivik, Anders Habbestad, and Martin Nilsskog, “Tax filing helps people report correctly,” *Skatteetaten*, Dec. 16, 2021.
8. Skatte Styrelsen, “Digital controls prevent errors and fraud on annual statements,” Feb. 9, 2024.
9. Australian Taxation Office, “How we use data and analytics.”
10. Treasury Inspector General For Tax Administration, “Virtual currency tax compliance enforcement can be improved,” July 10, 2024.
11. Jonathan Curry, “IRS prepping for at least 8 billion crypto information returns,” *Tax Notes*, Oct. 26, 2023.
12. OECD, “OECD Secretary-General Mathias Cormann welcomes pledge by 48 countries to implement global tax transparency standard for crypto-assets by 2027,” press release, Nov. 10, 2023.
13. Pankaj Kishnani, Dave Noone, and Thirumali Kannan, “Delivering integrated experiences through omnichannel service delivery,” *Deloitte Insights*, Aug. 29, 2023.
14. Lucas Goodman, Katherine Lim, Bruce Sacerdote, and Andrew Whitten, “Automatic tax filing: Simulating a pre-populated form 1040,” National Bureau of Economic Research, accessed on Jan. 31, 2025.
15. OECD, “Tax administration 2024,” Nov. 13, 2024.
16. Ibid.
17. The IRS, for example, provides tax guidance for gig workers at: IRS, “Gig economy tax center,” accessed Feb. 19, 2025.
18. Smart Nation Singapore, “Digital government blueprint,” June 2018.
19. Agency for Digital Government, “Web accessibility in Denmark,” accessed Jan. 31, 2025.
20. IRS, “System description,” accessed Jan. 31, 2025.
21. Australian Taxation Office, “How we use data and analytics.”
22. Inland Revenue Authority of Singapore, “Encouraging tax compliance,” accessed Jan. 31, 2025.
23. US Government Accountability Office, “Stimulus checks: Direct payments to individuals during the COVID-19 pandemic,” June 29, 2022.
24. Robert Plummer and Daniele Palumbo, “Covid: What impact has the furlough scheme had?” *BBC*, Sept. 30, 2021.
25. HM Treasury and HM Revenue and Customs, “The coronavirus job retention scheme final evaluation,” July 17, 2023.
26. OECD, “Tax policy reforms 2024,” Sept. 30, 2024.
27. Elaine Kamarck, “Building an agile government for an era of megachange,” The Brookings Institution, Feb. 10, 2021.
28. OECD, “Together for better outcomes,” Aug. 1, 2013.
29. Vero Skatt (The Finnish Tax Administration), “Building a digital ecosystem for business enterprises,” accessed Jan. 31, 2025.
30. Finnish Patent and Registration Office, “Annual report 2023,” accessed Jan. 31, 2025.
31. Te Kawa Mataaho Public Service Commission, “Performance improvement review of Inland Revenue,” June 2024.
32. Office of the Inspector General, “SSA OIG briefs Congressional Committee and IG Ennis launches taskforce to combat rising AI fraud,” July 25, 2023.
33. Kelly Phillips Erb, “Alleged tax fraud mastermind gets more jail time for role in billion dollar scheme,” *Forbes*, May 30, 2023.
34. Shane Wright, “Tax Office staff caught up in \$2 billion TikTok GST scam,” *The Sydney Morning Herald*, Feb. 13, 2024.
35. Ann Law, Tina Mendelson, Bruce Chew, Michael Wylie, and Scott Holt, “Could artificial intelligence fuel the future of financial investigations?” *Deloitte Insights*, Oct. 15, 2024.

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# About the authors

## Mark Price

maprice@deloitte.com

Mark Price is a principal in Deloitte's Government and Public Sector practice. He has more than 35 years' experience leading major technology transformation programs for a wide range of government, healthcare, and higher education clients.

Originally from the United Kingdom, Price started his career with an international strategy firm before serving as the head of strategy and business planning for a major teaching hospital. He joined Deloitte in the United Kingdom about 30 years ago and has lived and worked for the firm in the United Kingdom, Australia, and New Zealand before settling in the United States in 2000.

Price has worked with US Federal and State Government clients to implement innovative technology solutions to drive efficiency and effectiveness in operations and deliver positive outcomes for constituents. His experience spans tax and revenue, finance and administration, human services, transportation, and health care.

## Kathryn Karlman

kkarlman@deloitte.com

Kathryn Karlman is a managing director in Deloitte's Government and Public Sector practice. She has deep expertise in tax accounting, tax preparation, and compliance. In her consulting role, Karlman has been advising the Internal Revenue Service on the strategy and implementation of transformational efforts, including implementing the largest tax reform in recent US history. Prior to joining Deloitte Consulting in 2017, Karlman spent over 25 years in public accounting, serving as a tax advisor to a range of public and privately held companies.

## Leigh Braunstein

lbraunstein@deloitte.com

Leigh Braunstein is a managing director in Deloitte's Government and Public Sector practice. He has more than 25 years of experience leading central government and state agencies through legislative, technical, and operational change. As a regulatory, technical, and Gen AI leader, he focuses on assisting his clients in using emerging technologies and regulatory shifts to effectively drive agency transformation strategy. He has spent over 12 years assisting the Internal Revenue Service with its modernization journey.

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## Industry leadership

### William D. Eggers

Executive director | Deloitte Center for Government Insights | Deloitte Services LP  
+1 571 882 6585 | weggers@deloitte.com

William D. Eggers is the executive director of Deloitte's Center for Government Insights, where he is responsible for the firm's public sector thought leadership.

### Allan Mills

Partner | Deloitte Consulting  
+61 2 9322 7397 | allmills@deloitte.com.au

Allan Mills is a consulting partner, a member of Deloitte's national public sector industry executive, and the National Civil Sector lead partner.

### Alex Burrows

Partner | Deloitte Consulting  
+61 421 739 415 | aburrows@deloitte.com.au

Alex Burrows has more than 20 years analytics experience specializing in analytics consulting, data management programs, and data science.

### Ben Powell

Partner | UK Public Sector Tax leader  
+44 118 322 2815 | bpowell@deloitte.co.uk

Ben Powell is the leader of Deloitte's UK Central Government business as well as leading on tax administration across North and South Europe.

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# Contributors

**Editorial:** Kavita Majumdar, Aparna Prusty, Cintia Cheong, Pubali Dey, and Arpan Kumar Saha

**Creative:** Govindh Raj, Molly Piersol, Alexis Werbeck, and Meena Sonar

**Deployment:** Maria Martin Cirujano

**Cover artwork:** Alexis Werbeck



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