TAX DIGITALIZATION

EXECUTIVE SUMMARY

# Success Factors in Tax Digitalization

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BETTER THAN CASH ALLIANCE

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# FOREWORD

**In the face of the trifecta of fiscal adversity currently facing governments as a result of the COVID-19 pandemic, this report brings good news. It showcases a promising tool for emerging market governments to begin overcoming this adversity: tax system digitalization.**

Let us be clear, the fiscal impact of COVID-19 on emerging markets is devastating.

Economies are contracting significantly as a result of domestic and foreign lockdowns, which have stifled local and export markets. The World Bank's 2020 baseline forecast projects a 5.2% reduction in global GDP, which threatens to plunge over 71 million people into extreme poverty.

Public expenditures are rising precipitously in efforts to counter the pandemic's impact on lives and livelihoods. The IMF estimates that, thus far, the global cost of these fiscal measures is USD 8 trillion, or 9% of global GDP. Given the limited fiscal space of emerging economies, this has resulted in unsustainable budget deficits and concerning increases in debt-to-GDP ratios.

Financing sources to pay for urgent spending needs are dwindling. The elasticity of most revenue sources has shrunk tax bases as income and consumption have declined, which is a discouraging setback to recent successful domestic revenue mobilization reforms. Moreover, foreign funding sources have also dropped substantially. The Institute of International Finance estimates that investors have already withdrawn USD 96 billion from emerging-market stocks and bonds.

Tax system digitalization is not a magic bullet for solving these daunting fiscal challenges, but it can be an extremely valuable instrument in a government's fiscal toolbox. It can be used to enhance the cost-effectiveness of tax authorities by improving administrative efficiency and operational productivity, thus increasing net revenue. Also, it can reduce taxpayer financial and non-financial voluntary compliance costs, and can improve taxpayer trust and confidence through greater transparency and accountability, thereby strengthening the foundation of a successful tax system.

COVID-19 has amplified these attributes of tax digitalization, but it has added another substantial benefit: tax digitalization is characterized by touchless interactions, minimizing in-person contact.

The Better Than Cash Alliance member governments across the world are constantly searching for ways to serve their citizens better, faster, and more cost-effectively. It was at their request that the tax system digitalization work started.

We hope that this report and case studies provide a way forward for Alliance members and other emerging market governments to both serve their citizens and contribute to addressing the fiscal adversity resulting from the pandemic.

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# EXECUTIVE SUMMARY

This report presents a powerful new demonstration of how digital payments can transform millions of lives for the better. In emerging and developing countries (based on 2018 data), digitizing tax payments and related processes can raise an additional USD 300 billion[1] in government revenues annually. This represents almost one-third of the USD 1 trillion funding gap (estimated in 2018), which is pushing many of the Sustainable Development Goals (SDGs) out of reach.[2] The SDGs are the world's roadmap for people, prosperity, and planet; achieving them will deliver vast benefits – especially for the world's most vulnerable communities and ecosystems.

The devastating social and economic impacts of COVID-19 have heightened many of the challenges that the SDGs are designed to overcome. This, in turn, has heightened the need for proven solutions to keep the SDGs within reach. Digitalizing tax systems is such a proven solution, and is now needed more than ever. To date, over 800 tax policy measures have been taken by more than 100 countries worldwide in response to COVID-19.[3] Digitalization makes it easier for tax authorities to levy and collect taxes, and for businesses and individuals to pay them, among many other benefits, such as financial inclusion. Through a wide range of means described in this report, responsible digitalization enables governments to increase tax revenues. The value of digitalization has never been greater, at a time when governments face acute pressure on their national budgets, yet massive new public spending to protect their populations and economies.

Tax digitalization will also demand the attention of governments when charting their recoveries from the COVID-19 pandemic. Digitalizing taxes can open doors to stronger financial infrastructures and more confident international partners, and can also greatly improve public services, and reduce the need for in-person tax transactions as economies recover.

The report is both an evidence base and a practical guide to help policymakers harness the full potential of tax digitalization. Detailed case studies show how three leading countries are digitizing tax administration systems as a strategy to increase domestic revenue.[4] These cases underline the present urgency for governments to build effective, inclusive digital payments ecosystems to better cope with emergency situations in the future. For example:

**Rwanda**

**Combined with tax reforms, investments in digital tax services between 2010 and 2016 increased the tax-to-GDP ratio from 13.1% to 16.6%, and led to 14% average annual growth in revenue collected from 2010 to 2018.**

**Mexico**

**Mandatory e-invoicing between 2012 and 2017 drove a 48% increase in tax revenue from goods and services, increasing the tax-to-GDP ratio from 12.6% to 16.2%. From 2010 to 2016, overall tax revenue and social security contributions increased by around 95%, to over USD 177 billion.**

**Indonesia**

**The Directorate General of Taxes (DGT), Indonesia's national entity responsible for collecting federal taxes, has pursued digitalization as a critical means to encourage taxpayer compliance, leading to a 20% reduction in business tax compliance time between 2014 and 2019.**

DEFINITION

**Digitalizing tax administration** refers to the use of digital and data-driven approaches to optimize the functions and operations of revenue authorities. These include taxpayer registration, filing, compliance and audit, payment, and disputes, as well as broader taxpayer services and user experience.

# TOP 5 Benefits

## governments have achieved by digitalizing tax systems

### Higher revenue from increased taxpayer compliance

Tax avoidance and tax evasion cause significant revenue losses, which can be substantially recaptured by digitization. For example, researchers estimate that governments lose USD 200 billion in revenue every year to tax avoidance and evasion by large multinationals.[5] Digitalizing tax systems and joining the Automatic Exchange of Information (AEOI) – an international framework through which tax information is automatically shared between revenue authorities in different countries or jurisdictions – would allow emerging economies to recover USD 40–50 billion annually in corporate tax revenue alone.[6] In Mexico, 83% of taxpayers surveyed thought that it was likely they would face penalties if they failed to comply with their tax obligations.[7] In Rwanda, the number of registered taxpayers almost doubled after e-filing and e-payments were introduced, rising from 144,000 to 242,000.

### Lower administrative costs through automation

Eliminating manual processes improves the efficiency and effectiveness of tax administration. Recent evidence from the Philippines, Ghana, and other countries suggests that digitalization can cut the cost of tax collection by as much as 30%.[8] Mexico reduced the cost of collection by 57% between 2006 and 2018, while Indonesia cut business tax compliance time by 20% between 2014 and 2019.[9] In Rwanda, electronic billing machines reduced the average time it takes businesses to file VAT returns from 45 hours down to 5.[10]

### More transparency and accountability leading to reduced leakages and corruption

Shifting tax authorities to digital platforms improves administrative transparency and accountability. In Afghanistan, total revenue collection in 2016 was 20% higher than in 2015. The Afghan Revenue Department credits part of the increase to the automated tax collection system implemented at collection points. The automated system resulted in a significant simplification of processes, increasing transparency and reducing the administrative burden of managing cash.[11]



### Better data for more effective decision-making

Tax digitalization generates more timely, accurate, and detailed data. The digitalization of tax is fully aligned with the G20 Anti-Corruption Work Plan 2019–2021, which calls on governments to take action to promote integrity and transparency through use of new technologies.[12] This allows tax authorities to better track revenue collections, measure user satisfaction, and assess staff performance. In Mexico, data are captured in a standardized way and the federal tax authority regularly shares information with other entities such as the Ministry of Finance's intelligence unit, the Mexican Social Security Institute, the Institute of the National Housing Fund for Workers, the National Banking and Stock Commission, and the Ministry of Economy, as well as with local governments.

### A broader tax base from greater business formalization

A large informal economy (e.g. 34% of GDP in Sub-Saharan Africa[13]) means a narrower tax base and, therefore less revenue. Tax digitalization encourages small enterprises – defined by the OECD as businesses with between 10 and 49 employees – to gradually formalize and pay taxes.[14] In 2014, Mexico introduced legislation that made e-invoicing mandatory.[15] By 2016, production of formal goods and services rose by nearly 50%, significantly increasing the tax base. This, in turn, contributed to a 21% increase in the country's tax-to-GDP ratio between 2014 and 2016.

### OVERVIEW OF TAX DIGITALIZATION BENEFITS AND CHALLENGES

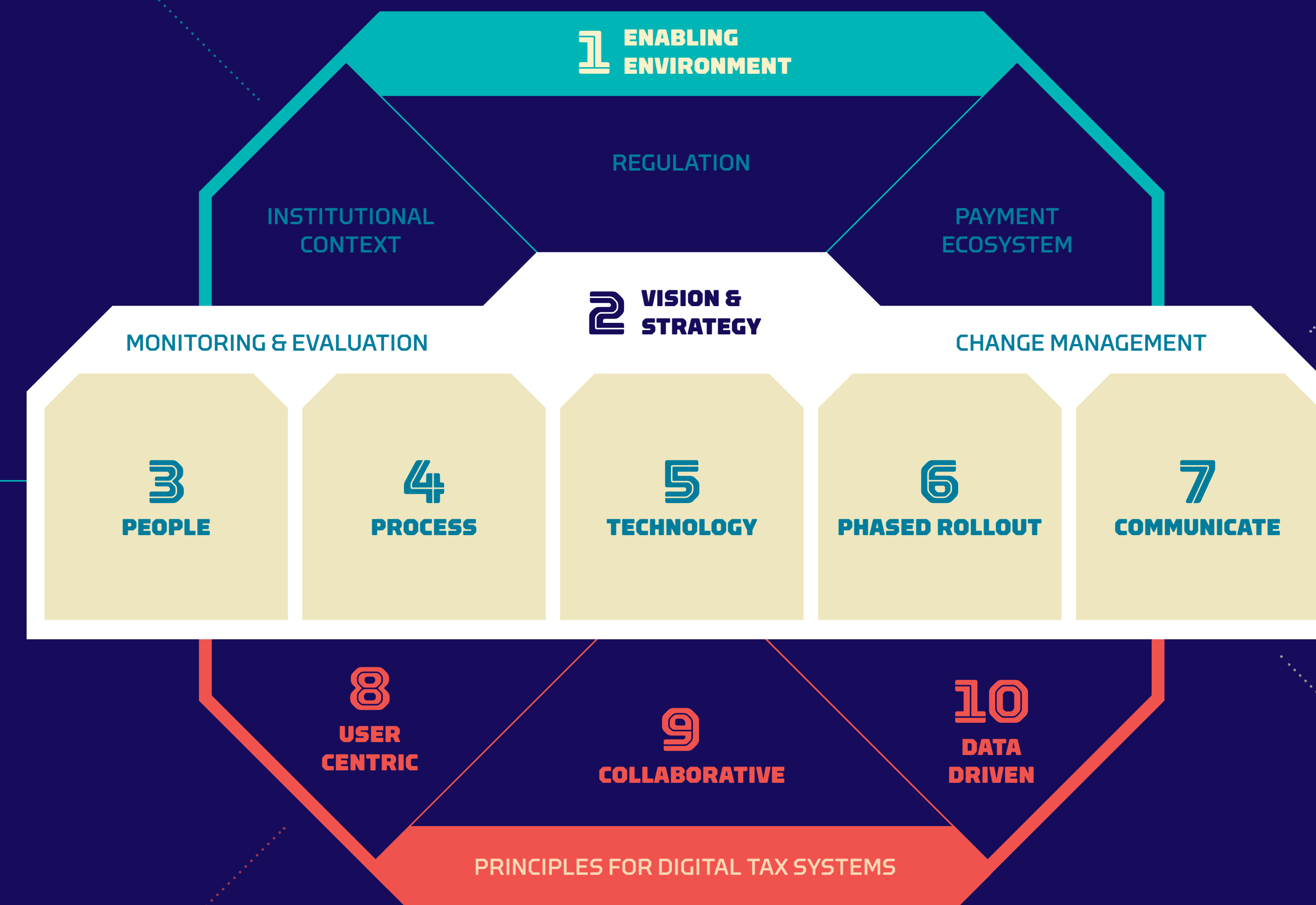
| | GOVERNMENT | BUSINESS | INDIVIDUALS |
|---|---|---|---|
| **Main Value Proposition** | Increased revenues at a lower administrative cost | Lower tax compliance burden | Lower tax compliance burden |
| **Benefits** | Increased revenue<br>Lower admin cost<br>Increased transparency leading to reduced corruption and greater legitimacy<br>Data led policy making<br>Greater business formalization | Reduced time and resources dedicated to taxes<br>Greater transparency during tax cycle<br>Increased use of technology after compliance | Reduced time and resources dedicated to taxes (e.g. advisor)<br>Increased institutional trust |
| **Challenges** | Implementation challenges<br>Low initial uptake<br>Security and privacy risk (e.g. gov. misuse or 3rd party hacking) | Increased burden with more information demanded<br>Cost of adaptation and learning<br>Security and privacy risk (e.g. gov. misuse or 3rd party hacking) | More rigid payment deadlines<br>Risk of an unfair tax system for those without digital access<br>Security and privacy risk (e.g. gov. misuse or 3rd party hacking) |

# The Guide

This report summarizes global good practices and provides a step-by-step guide for governments to help digitalize their tax administration systems and maximize the benefits of doing so. Ten success factors are identified based on digitalization research, and in-depth case studies are provided from three countries that have taken strategic steps to digitalize their tax systems over recent years: Indonesia, Mexico, and Rwanda. These case studies are designed to support tax administrators, policymakers, private sector tax support services, and all players considering or implementing digitalization initiatives.

**Essential foundations for digital tax administrations** Digital transformation projects in revenue authorities are often ambitious, multi-year initiatives. The environment in which these projects are undertaken directly impacts on the degree of success they achieve. For instance, if legal and regulatory frameworks do not recognize the legal validity of digital interactions with the revenue authority, this can mean in-person taxpayer registration is still required, negating much of the efficiency and cost benefit of digitalization.

**Vision, strategy, change management, monitoring, and evaluation** Countries that have successfully digitized tax systems, started with a clear vision and a robust strategy for realization. Change management is a central pillar of an effective digitalization strategy.




**Overarching principles for digital tax systems** These include customer-centricity, driving down compliance costs, and enhancing data capabilities to improve tax intelligence, compliance, and service delivery. Improving intelligence and service delivery in such a cross-cutting area of public policy also requires revenue authorities to collaborate with other public institutions and the private sector.

**Effective implementation** This requires a process re-design, and investment in attracting, retaining, and developing the right talent to deliver the agreed strategy. Managing complex technology projects requires new approaches, including progressive iteration and testing. Successful digitalization strategies are always accompanied by clear communication with internal and external stakeholders to ensure alignment and give due consideration to the views and concerns of all stakeholders. Robust performance and monitoring systems are also vital to help the revenue authority keep digitalization initiatives on track or course correct as needed.

**FIGURE 1:** The success factors address the overarching framework for designing successful digital tax systems. This framework covers an enabling environment, which refers to the essential foundations for digital payments and digital tax administrations, along with strategic and operational factors, and general principles for tax digitalization initiatives.

# Conclusion

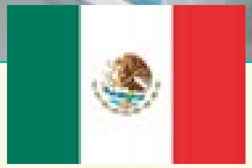
These case studies show that although often complex and challenging, tax digitalization has the potential to deliver major benefits for governments, businesses, and individuals when it is designed and implemented effectively. Crucially, these benefits can drive financial inclusion and economic opportunity, particularly for women and marginalized groups. Mexico, Indonesia, and Rwanda provide a compelling picture of the power of digital tax systems to help achieve the SDGs by growing government revenues and empowering businesses.

## Rwanda

The consistency of Rwanda's digital tax journey has delivered highly impressive results and provided valuable lessons for other jurisdictions. Rwanda's whole-of-government strategic vision and its focus on continuous improvement make the country a regional leader in deploying digital technologies to improve tax system performance. Some important lessons include: (1) leveraging strong government support to increase compliance and drive uptake of new systems and processes; (2) collaborating effectively with the private sector to create commercially viable delivery models for tax digitalization; and (3) adopting an agile approach to software implementation.

As Rwanda's digitalization journey continues to gather pace, new opportunities to drive progress are emerging, for example:

- **Strengthening organizational capability** by recruiting, training, and retaining top digital talent.
- **Using data insights to increase collection and compliance** by cross-checking data sources, such as e-billing machines and VAT-compliant transactions.
- **Increasing investment in simplifying tax services for small and micro-businesses,** including accommodation of varying levels of information technology literacy and access, with a strong focus on gender inclusion.

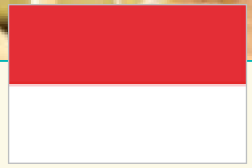


## Mexico

Mexico has implemented a suite of tax policy and administration reforms that has lifted its tax-to-GDP ratio by a remarkable 4 percentage points between 2012 and 2016. The country's tax digitalization journey has many lessons to draw from: (1) crafting a compelling vision and strategy as an essential enabler of change, helps to align and sustain efforts over time; (2) securing flexible and long-term financing ensures reform effort are sustainable; and (3) using data to continuously improve internal operations and customer-facing services is key to a tax authority achieving its strategic objectives.

As Mexico continues to drive tax digitalization forward, some avenues of further opportunity could be explored:

- **Promoting an inclusive digital payments ecosystem.** Wider adoption of digital payments across the economy helps drive financial inclusion, broadens the tax base, and provides revenue authorities with more data about economic activity to improve compliance.
- **Simplifying tax processes to enable seamless digital taxpayer services.** Digitalization efforts offer an opportunity to further simplify services to reduce compliance costs, which, in turn, drives greater uptake by taxpayers. This can create a virtuous cycle by providing governments with greater revenue to invest in further productivity-enhancing reforms.
- **Collaborating with subnational levels of government.** Supporting regional and municipal tax authorities in their digital journeys – particularly through greater alignment across levels of government – can deliver significant benefits to all stakeholders, including individuals and businesses.



## Indonesia

Indonesia has achieved important milestones in its digital tax journey, despite the complexities of managing a digital tax system across several levels of government, 17,000 islands, and over 600 ethnic groups and languages. Indonesia offers many lessons for other jurisdictions, including: (1) actively managing change and investing in people, improving training for tax officers, and a more competitive remuneration scheme to retain and recruit highly skilled staff;[16] (2) leveraging the growing digital ecosystem, in partnership with the private sector, to provide taxpayers with greater access to value-added services through third-party service providers; and (3) aligning stakeholders to enable an effective procurement process, with support from the highest levels of government.

As Indonesia continues on its digitalization journey, the following opportunities merit close consideration.

- **Articulating and building support for a long-term tax digitalization strategy.** Helping all stakeholders understand the country's digitalization journey and its vast potential benefits can help drive buy-in, uptake, and innovation.
- **Focusing on process simplification and optimization, especially for post-filing procedures.** For example, supplier VAT declarations are not systematically checked against buyer VAT declarations. This has resulted in ongoing tax evasion through false invoicing.
- **Reemphasizing data standardization to improve process flows.** The data architecture of systems used for reporting different taxes (i.e. VAT, Personal Income Tax) is often different, making data analysis highly challenging. Standardized data collection will enable far more data-driven insights to underpin more effective policymaking and implementation.
- **Continuing to leverage the country's growing digital payments ecosystem through public Application Programming Interfaces (APIs).** Public APIs enable tax authorities to offer new services to taxpayers at a faster rate, improving the taxpayer experience. This process needs to be managed carefully, employing responsible practices that protect end-users and their personal data.

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## The Better Than Cash Alliance

The Better Than Cash Alliance is a global partnership of governments, companies, and international organizations that accelerates the transition from cash to digital payments in order to advance the Sustainable Development Goals. Based at the United Nations Capital Development Fund (UNCDF), the Alliance has 75 members, works closely with other global organizations, and is an implementing partner for the G20 Global Partnership for Financial Inclusion.



## Notes

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