Tax Administration
Digitalization Challenges

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“The views expressed in this presentation are of the authors and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.”
Opportunities from digitalization

Pandemic a spur to wider use of digital methods in revenue administration
  • With signs that those using them more have fared better
  • But has to be implemented well!

Opportunities, but challenges too
  ▪ Multinationals with no physical presence
  ▪ On-line platforms with hard-to-tax participants – but platforms can play role in tax collection too
Globally, Two Macro Challenges
## 1. Increasing Productive ICT Expenditure

<table>
<thead>
<tr>
<th>Country Group</th>
<th>ICT Expenditure(^1) (Median % of Op. Exp.)</th>
<th>General Gov. Revenue (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Euro Area</td>
<td>6.80</td>
<td>7.55</td>
</tr>
<tr>
<td>Major Advanced Economies (G7)</td>
<td>13.64</td>
<td>11.19</td>
</tr>
<tr>
<td>Other Advanced Economies</td>
<td>14.58</td>
<td>13.92</td>
</tr>
<tr>
<td>European Union</td>
<td>7.08</td>
<td>8.21</td>
</tr>
<tr>
<td>Emerging Market and Developing Economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emerging and Developing Asia</td>
<td>5.94</td>
<td>3.06</td>
</tr>
<tr>
<td>Emerging and Developing Europe</td>
<td>6.98</td>
<td>8.82</td>
</tr>
<tr>
<td>Latin America and The Caribbean</td>
<td>6.49</td>
<td>5.63</td>
</tr>
<tr>
<td>Middle East and Central Asia</td>
<td>2.14</td>
<td>0.48</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>1.10</td>
<td>1.78</td>
</tr>
<tr>
<td>Worldwide</td>
<td>5.70</td>
<td>5.09</td>
</tr>
</tbody>
</table>

\(^1\) Direct ICT expenditure by tax administrations (excluding DPI, e-government, other shared services).

Source: IMF ISORA and WEO Databases. Approximately 169 Countries Represented.
2. Addressing Cybersecurity ... and information security

Source: UN ITU 2020 Global Cybersecurity Index
At National Levels, Five Key Challenges
1. Keeping Digitalization in Context

**Taxpayer Behavior**
- History
- Geography
- Identity
- Demographics
- Social Structure
- Economics
- Cultural Norms
- Political Processes
- Ethical Norms
- Infrastructure
- Information
- Communication

**Time + Space** → **Political Order** → **National Governance**
- Philosophy
- Influencers
- Cohesion
- Stated Policy
- Actual Policy
- Formal Institutions
- Other Institutions
- Foreign Actors
- Accountability
- Rule of Law

**Time + Space** → **Political Decay** → **Tax Administration**
- Legitimacy
- Autonomy
- Legal Structure
- Command, Control
- Org. Design
- Network, Territory
- Resources
- Human Capital
- Operations
- Ethical Norms

**Interventions**
2. Prioritizing Value in Reform Planning

The three categories of activities...

- **Quick Wins**
- **Core Initiatives**
- **Other Priorities**

**Implementation Complexity**

- **High**
- **Low**

**Overall Effect**

- **Difficult**
- **Easy**

Categories:

- **Human Capital**
- **Organization Design**
- **IT**
- **Strategy & Operations**
2. Prioritizing Value in Reform Planning

- 1. Reform Strategy
- 2. IT Strategy
- 3. Corporate Strategy / Plan
- 4. Tax Office Rationalization
- 5. Enterprise IT Modernization
- 6. International Taxation
- 7. Headquarters Modernization
- 8. Targeted Policy Proposals
- 9. Targeted Data Exchange
- 10. Minimum Competency Training
- 11. Human Resources Management System
- 12. LTO Modernization
- 13. Tax Code
- 14. Core Processes Enhancement
- 15. Full Function-Based Operations
- 16. New Core ITAS Implementation

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- Human Capital
- Organization Design
- IT
- Strategy & Operations

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**Overall Effect**

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- Low

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**Other Priorities**

- Difficult
- Easy
3. Advancing Ecosystem Development

**External Stakeholders**
- Policymakers
- Ministry of Finance
- Customs Department
- Tax Accountants
- Taxpayers
- Non-Governmental Organizations
- Legal Entities
- Physical Persons
- National or Central Bank
- Mobile Banking Operators
- Tax Software Suppliers
- Hardware & IT Software Suppliers
- Knowledge Brokers

**Internal Stakeholders**
- Executive Leadership & Management
- Governance Committees
- Technical Specialists
- End Users
- Support Staff
- Service Owners
- Executive Sponsors
- Service Providers
- Domain Experts
- Data Center Operations
- Cloud Storage & Computing
- Telecommunications
- Telephony
- Commercial Banks
- Tax Agents

**Service Providers**
- Tax Administration
- Information Technology Group
- IT Systems and Operations
- External Dependencies
4. Scoping Productive Digital Transformation

Dimension of Change

Operating Context
- Digital Public Infrastructure
- Digital Fiscal Ecosystem

Revenue System
- Tax Policy
- Legislation
- Tax Administration

Illustrative Focus and Range of Potential Topics

Readiness: Digital Policies, Connectivity, Literacy

Integration: Identity, Payments, Data Exchange

Orchestration: Standards, Processes, Interactions

Policy Agenda: Compliance, Deliberation, Formulation

Organization: Reform, Optimization, Transformation

Operations: Digitization, Digitalization, Automation
What’s Next?
Artificial Intelligence
# Digital Operations and AI: *Fifty Years* of History

<table>
<thead>
<tr>
<th>Era</th>
<th>Technology Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000s</td>
<td>Advanced Analytics, Machine Learning</td>
</tr>
<tr>
<td>2010s</td>
<td>Digital Transformation, Big Data, Data Warehouse</td>
</tr>
<tr>
<td>2020 – 2024</td>
<td>Generative AI, Natural Systems</td>
</tr>
<tr>
<td>2024+</td>
<td>Legal &amp; Ethics, Artificial Intelligence</td>
</tr>
</tbody>
</table>
Digitalization Potential
The biggest opportunities for most developing tax administrations remain unchanged in recent years:

- Digitalizing and automating:
  - Core tax administration processes
  - Centralized support services

- Extending digitalization to the rest of the organization to achieve a fully paperless work environment

- Introducing a handful of new, high-value electronic capabilities (e.g., e-invoicing, e-audit)

Serious challenges still exist in this space
Digitalization Potential: Institutional

Important institutional reforms and capabilities enabled by digitalization are still relevant, including:

- Improvements in organizational design and delivery:
  - Transition to function-based administration
  - Changes in the degrees of tax office autonomy
  - Centralization or decentralization of key functions
  - Standardization of operations across offices

- Effective use of data to improve performance outcomes
Thank you!

Dive into the world of tax and customs with the help of the new IMF portal IMF.org/RevenuePortal