

Transformation on Stilts: Towards Tax Administration 3.0

Kenya Revenue Authority Tax Summit, 13 October 2022

Prof. dr. ir. R. (Rex) Arendsen | Leiden University



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The Netherlands

Introduction

- Rex Arendsen is a Leiden University Professor by Special Appointment (Endowed Professor) on Social and Historical Context of Tax Law since June 2015.
- This chair has been formed by the private founding 'Belastingmuseum Prof. dr. Van der Poel'. His position is financed by the Customs Administration of the Netherlands, the Belastingmuseum founding and Leiden University.
- Rex works for 1 day a week for Leiden University and for 4 days a week for the Dutch tax administration. The Dutch tax administration financially supports the 1 day per week secondment at Leiden University.
- Rex was an advisor of the OECD's Forum on Tax Administration Secretariat from November 2018 till July 2022. He contributed to the Tax Administration 3.0 series of products.



Agenda

1. Theoretical Background

Q&A

2. Tax Administration 3.0

Q&A

3. Towards Tax Administration 3.0

Q&A



https://www.123rf.com/photo_70315721_endless-road-between-an-avenue-of-bare-trees-during-the-winter-on-a-dike-in-dutch-farmland-.html

Part 1 – Theoretical Background



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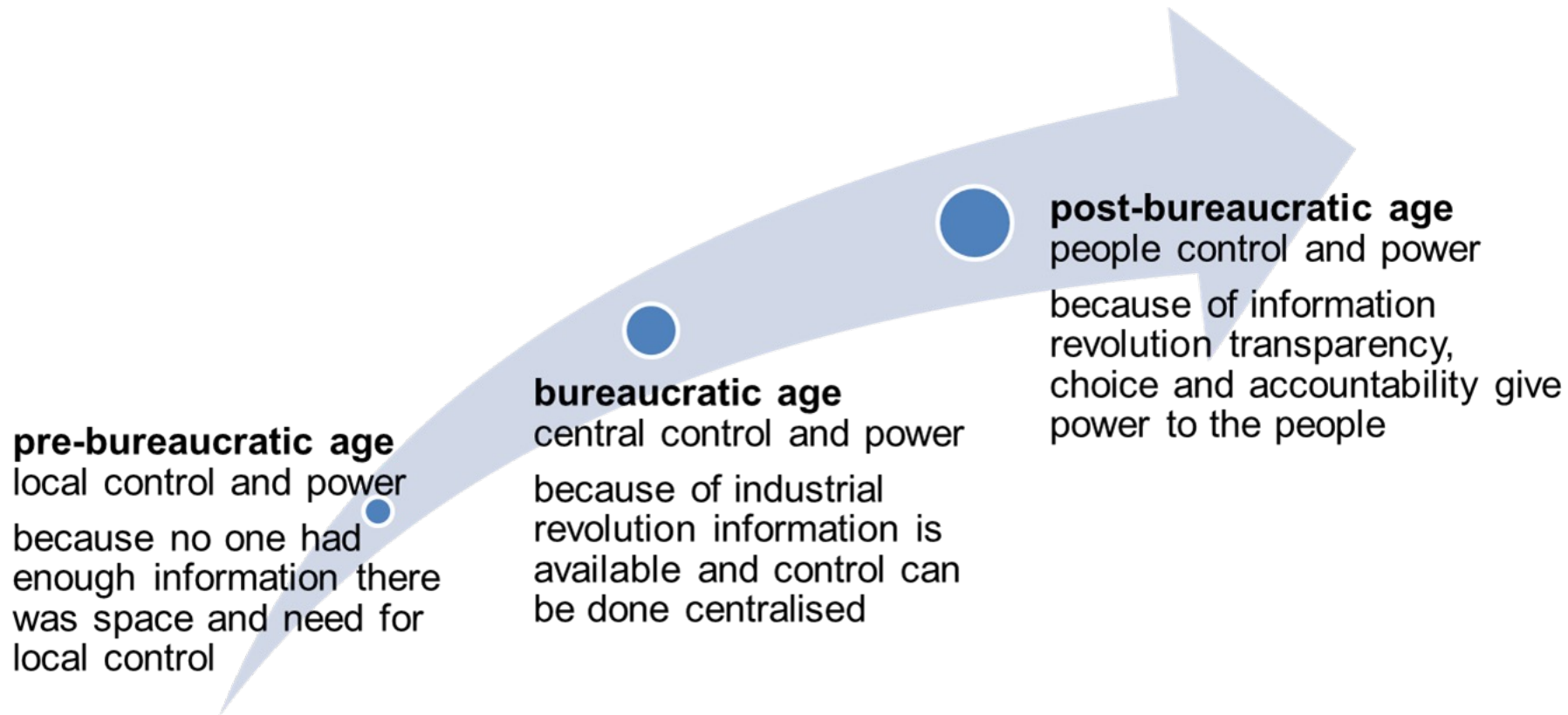
Key Scientific Question

Which mechanisms (powered by digital innovations) may lead to fundamental changes of the implementation and organization of tax administration?

Arendsen, R. (2021), Exploring Tax Administration in the Digital Age, Back to Basics, in IEB Report 3/2021, The Barcelona Economics Institute, Universitat de Barcelona, pp. 14-17.

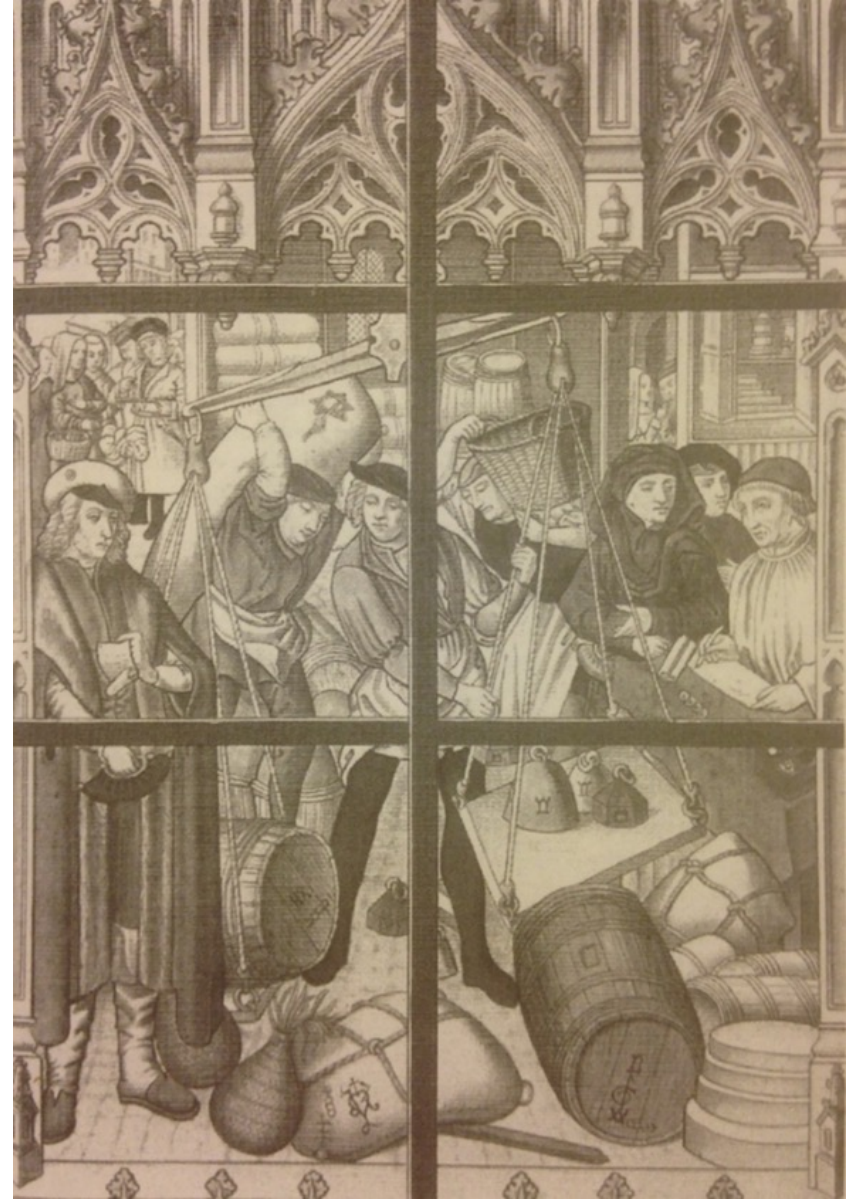
Arendsen R., Wittberg, L, & Goslinga S. (2019). Towards a New Business Model for Tax Administration, Exploring paradigm shifts. Journal of Internet Law 23 (2), Wolters Kluwer, pp. 3-14.

Impact of administrative innovation



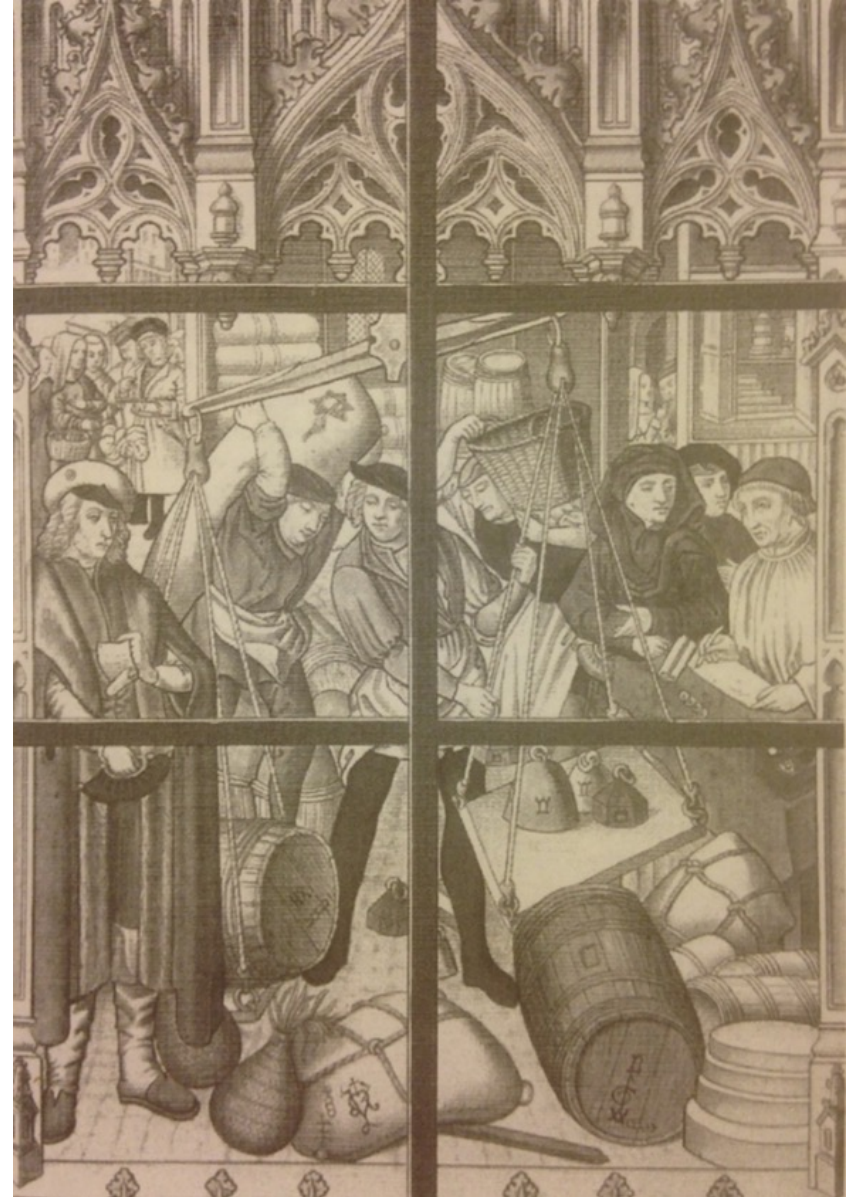
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Pre-bureaucratic age

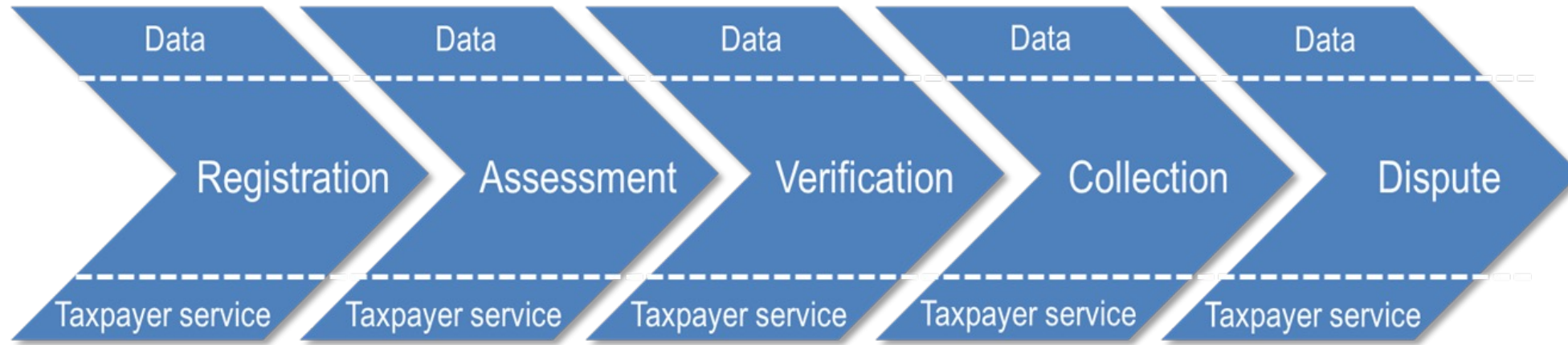


Administrative innovation

- Massive growth of amount of transactions
- For efficiency reasons de-connection of:
 - *goods (services)*
 - *'tax' relevant data*
 - *money*
- Centralised bureaucracies
- Growth in/of intangibility (services, digital)
- *Gaming the system*



Tax Administration Business model



- “A bundle of specific activities conducted to satisfy the perceived needs of the market“ (Amit & Zott, 2012)
- The way an organisation creates value

Source: OECD

Digital Transformation

- *Digitalisation*: introducing ICT in paper-oriented processes.
- *Digital Transformation*: refers to the (disruptive) economic and societal effects of digitalisation. It is changing the way people interact with each other and society more generally (raising a number of pressing issues in the areas of jobs and skills, privacy and security, education, health as well as in many other policy areas)

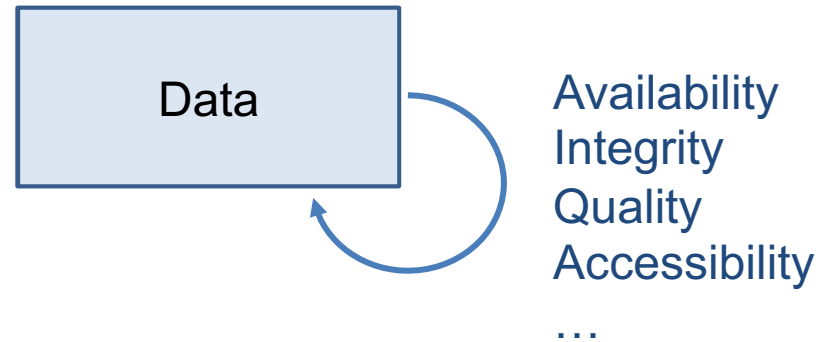


*OECD (2019), Going Digital: Shaping Policies, Improving Lives, OECD Publishing, Paris,
<https://doi.org/10.1787/9789264312012-en>*

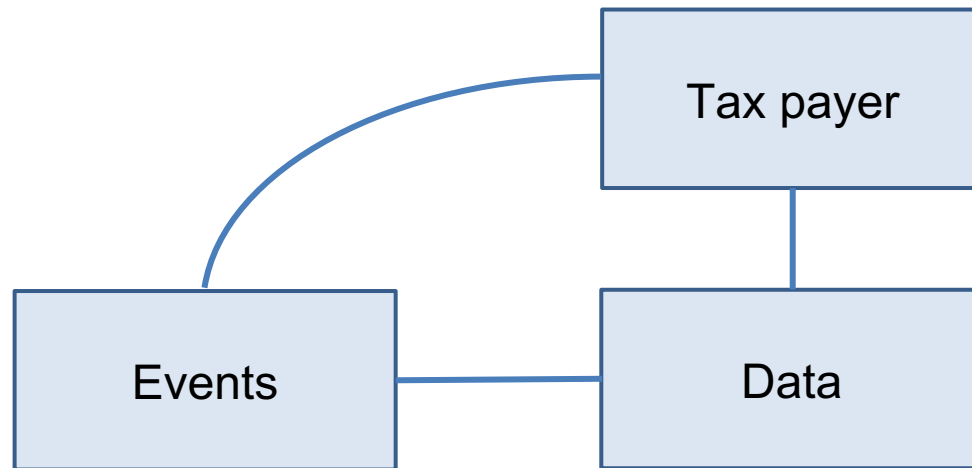
A Conceptual Taxation Model



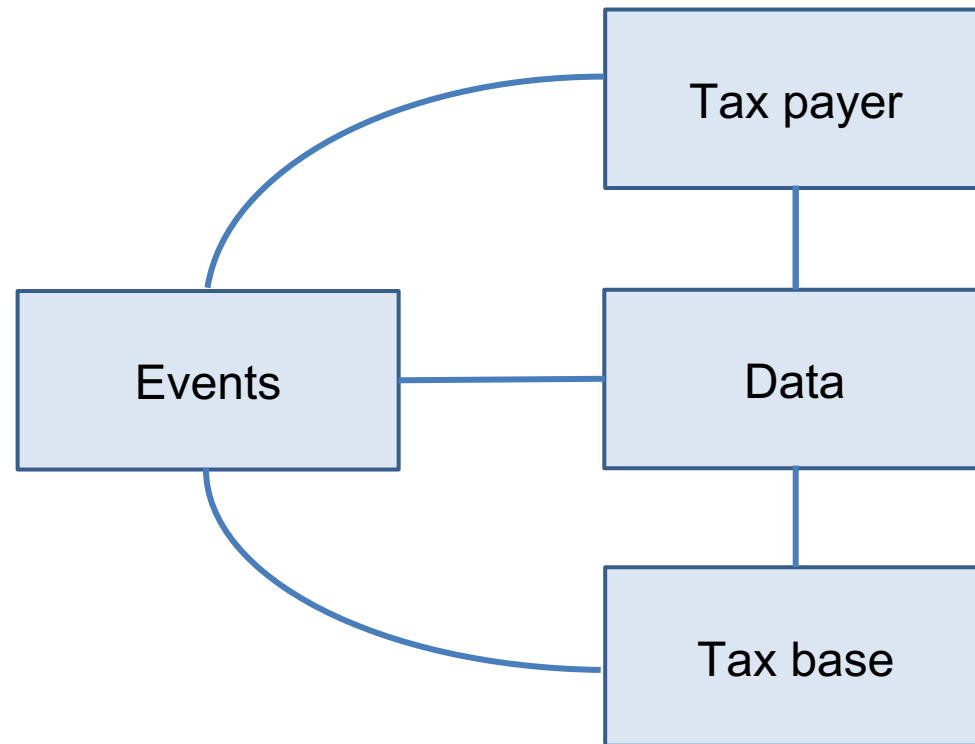
Data *management*



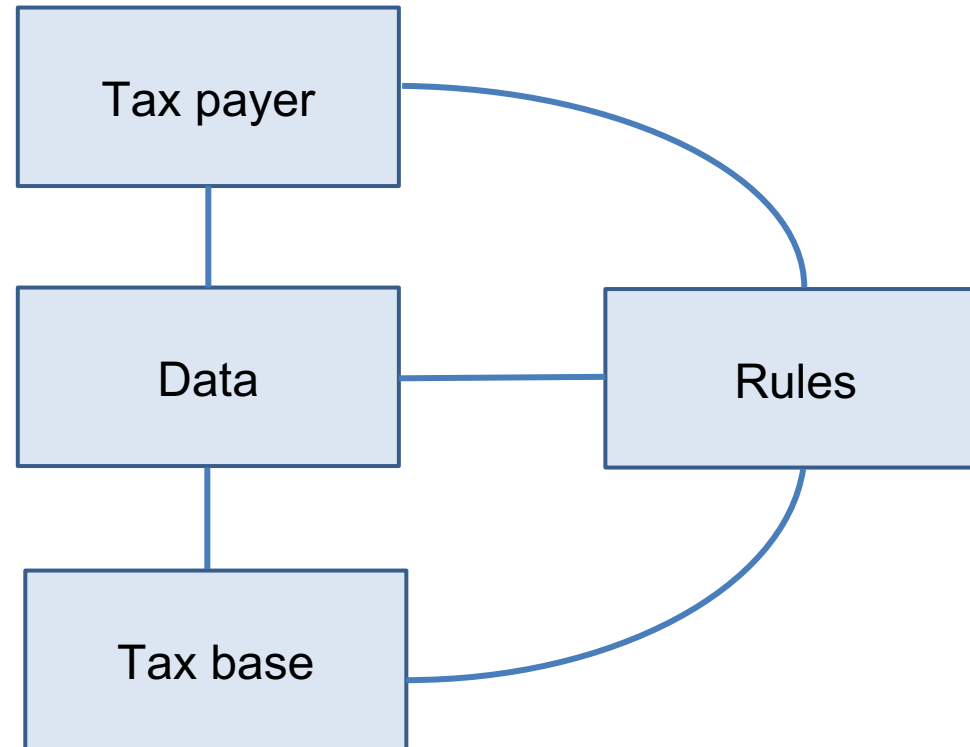
Taxpayer ecosystem perspective



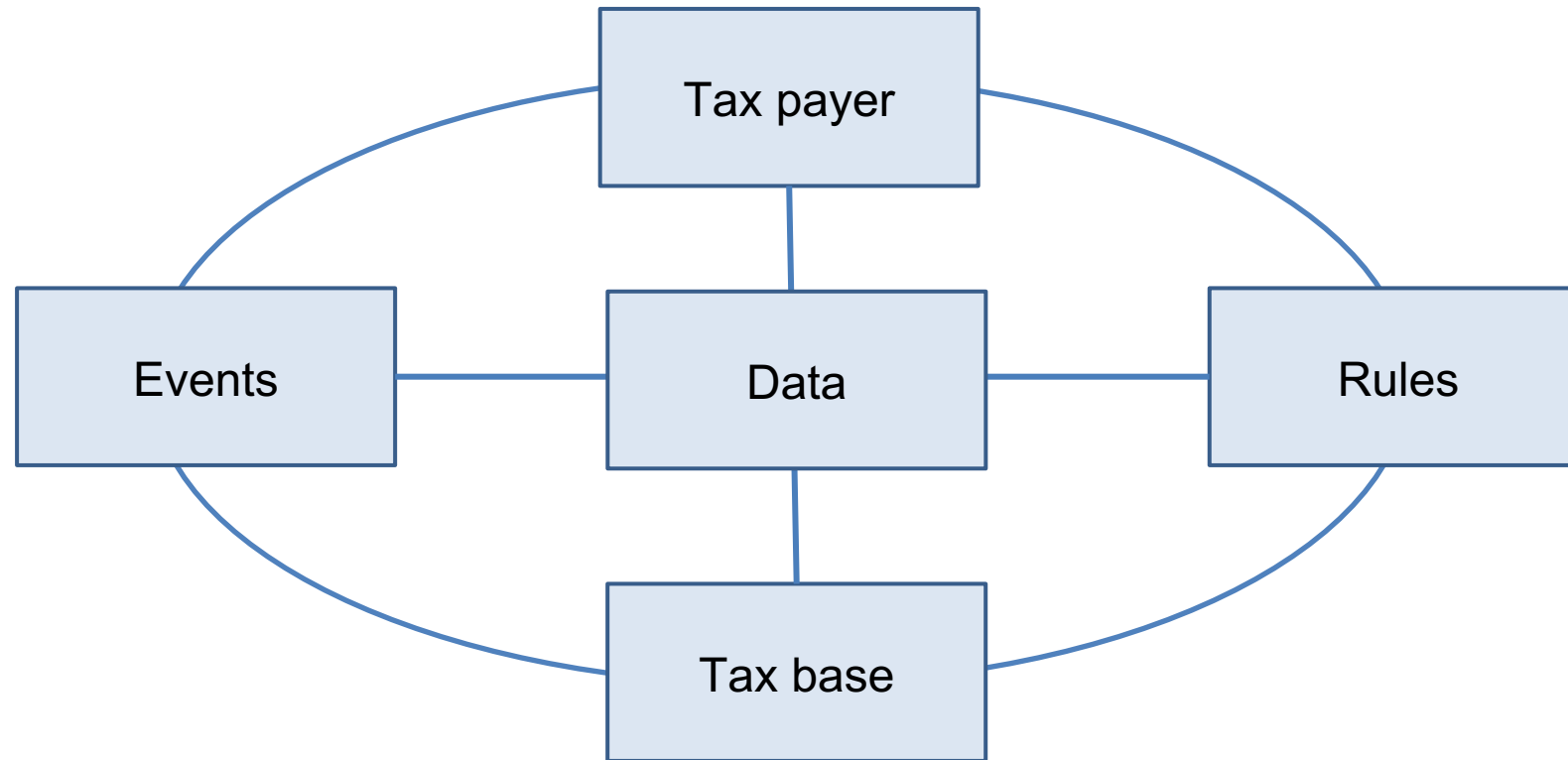
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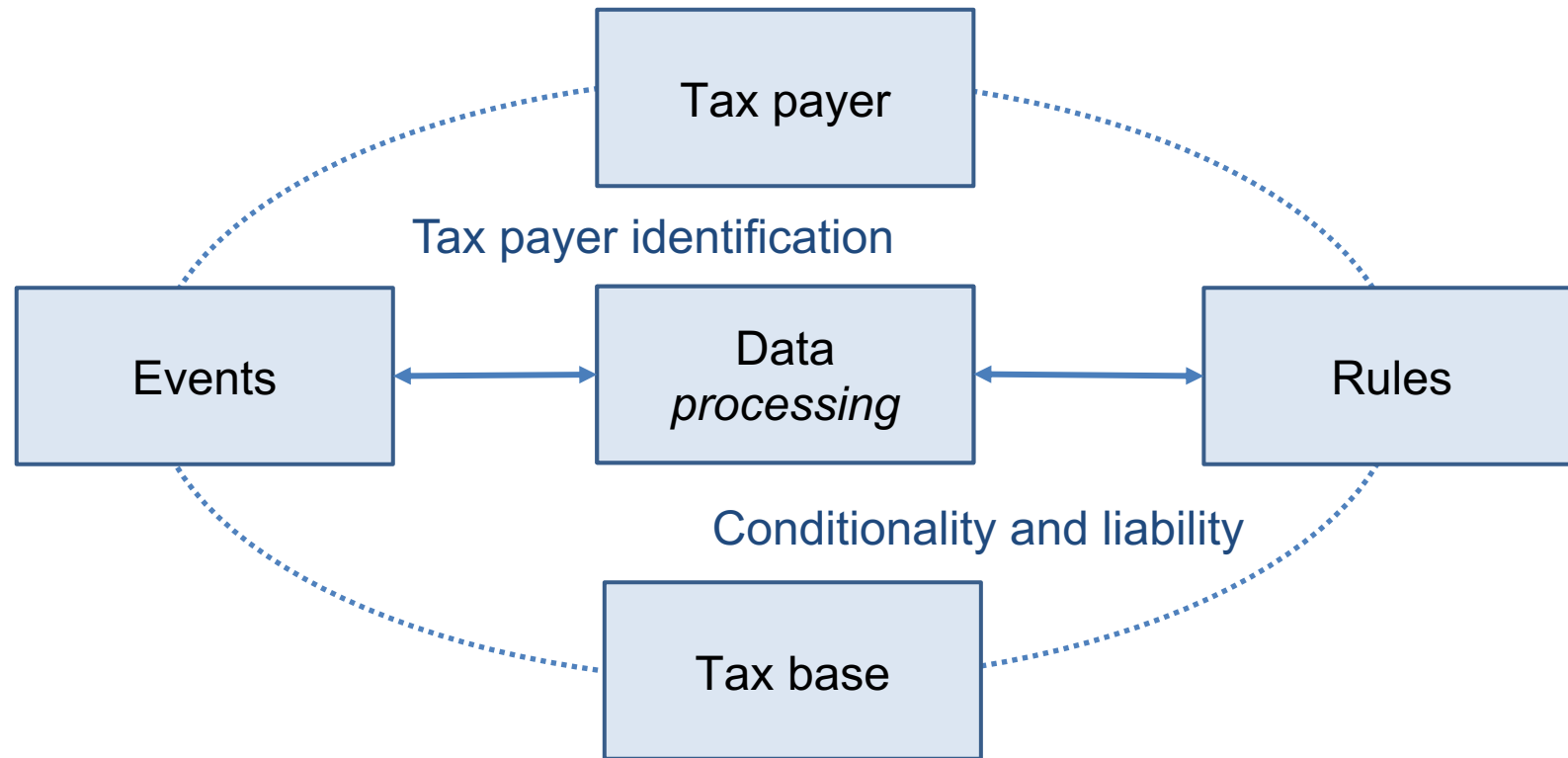
The legal perspective



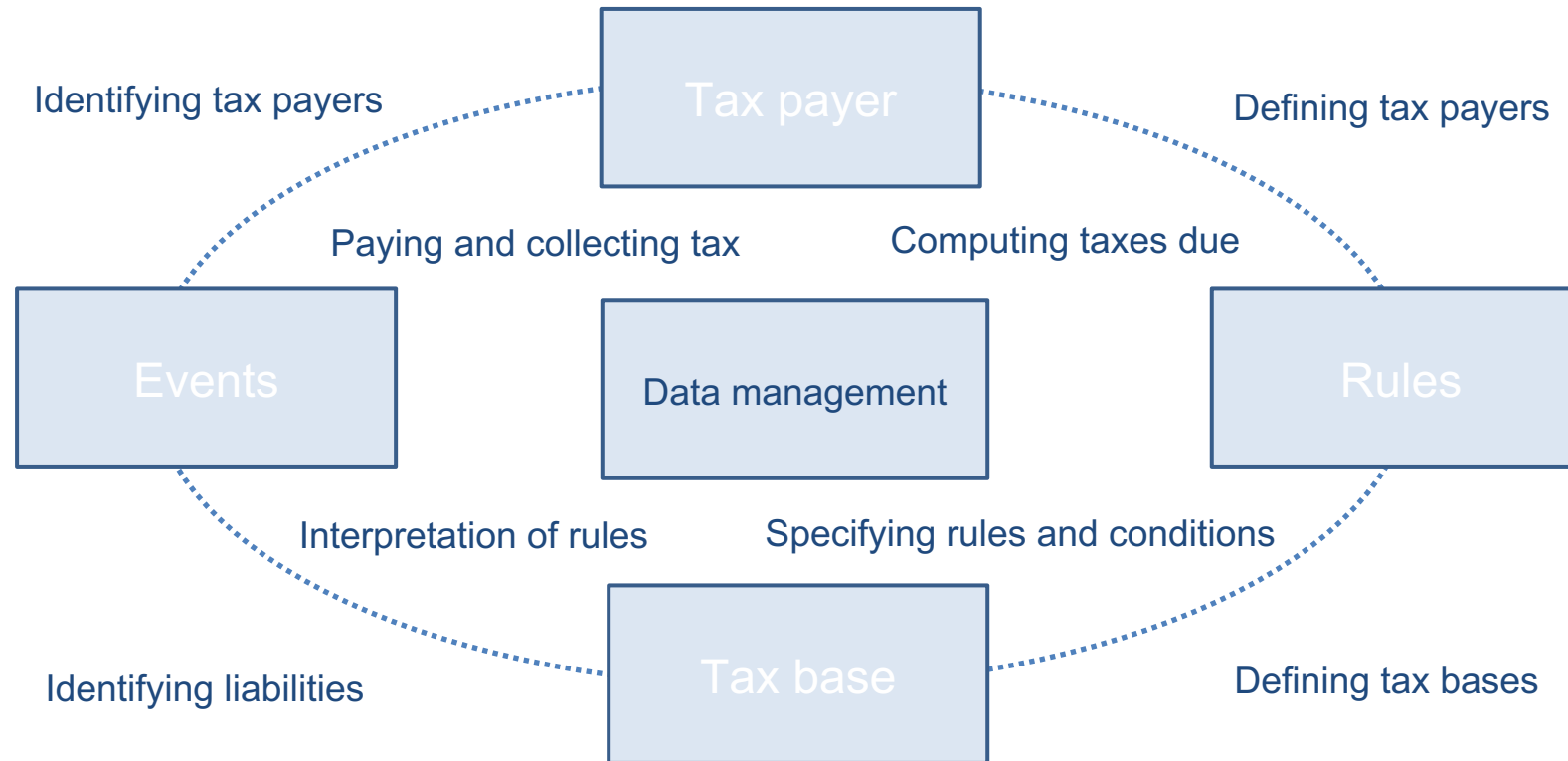
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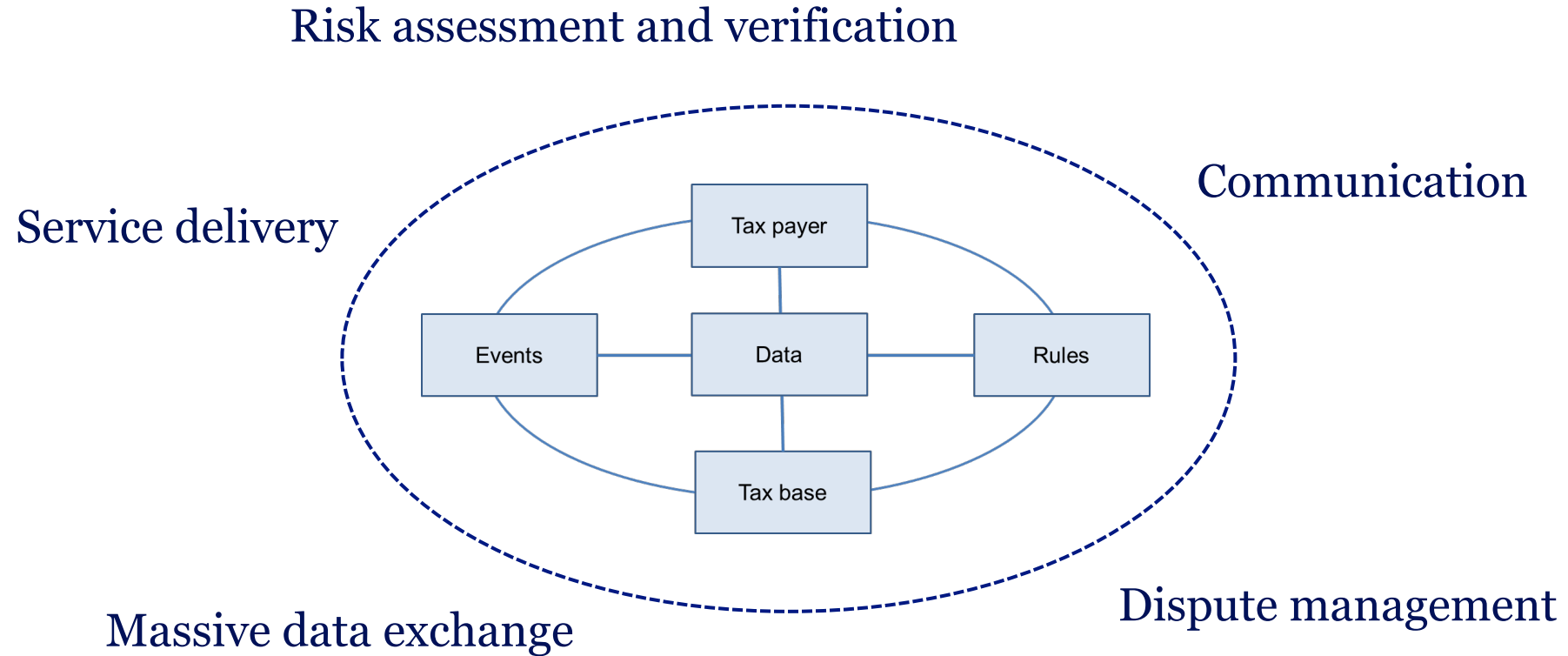
Taxation = Data processing



Core taxation processes

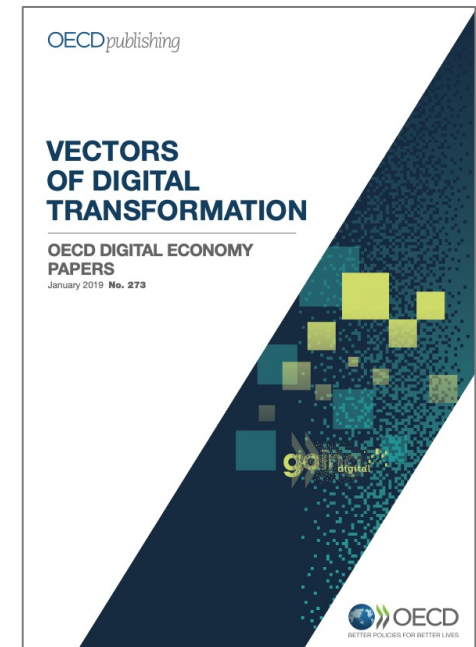


Supporting processes



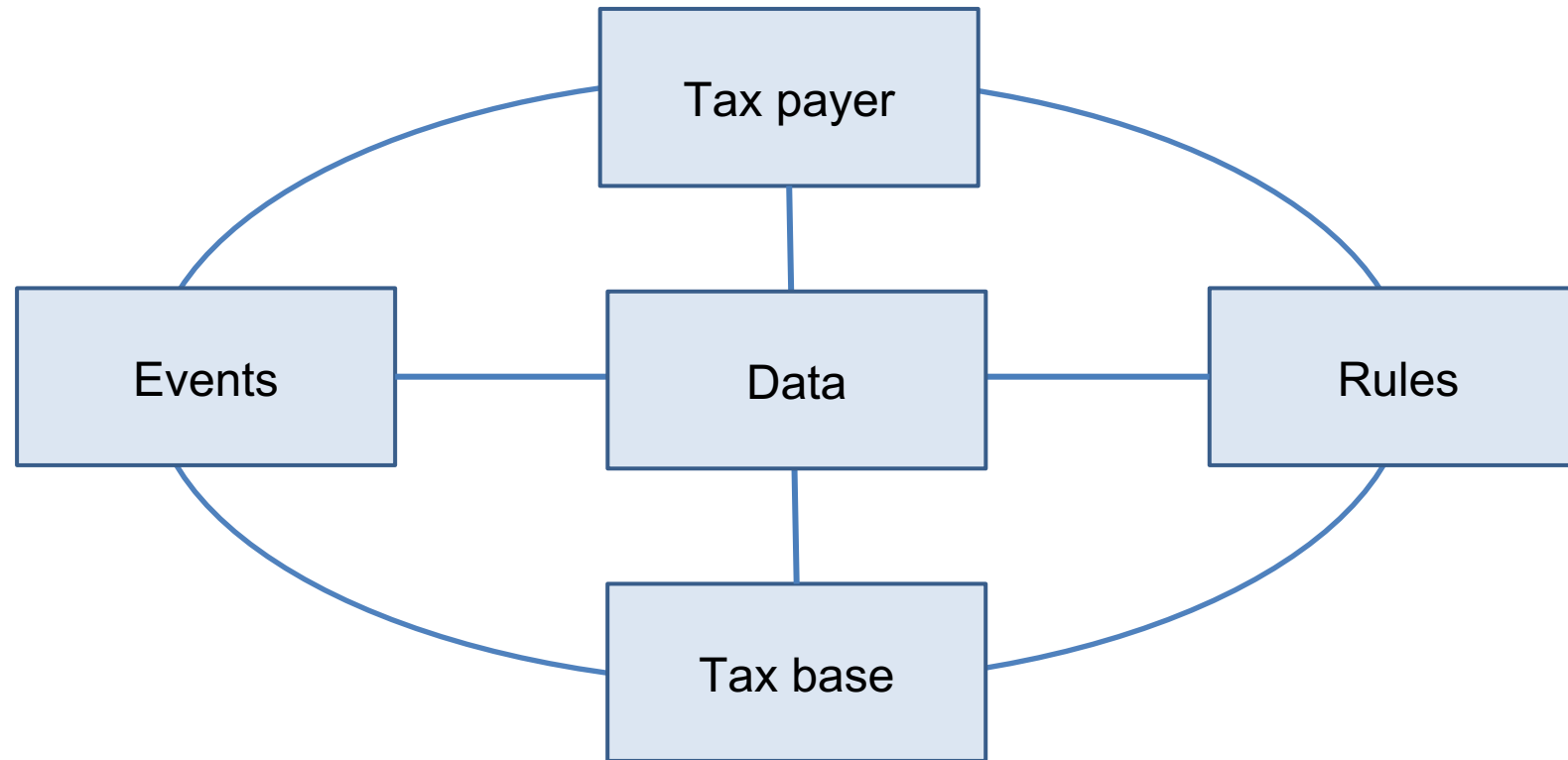
Impact of digital technologies

- Omnipresent computational power and data
- Instant answers and services
- Autonomous, intelligent decision making
- New digital business models (platforms):
 - Scale without mass
 - User participation and the value of data
 - Reliance on intangible assets, incl. IP

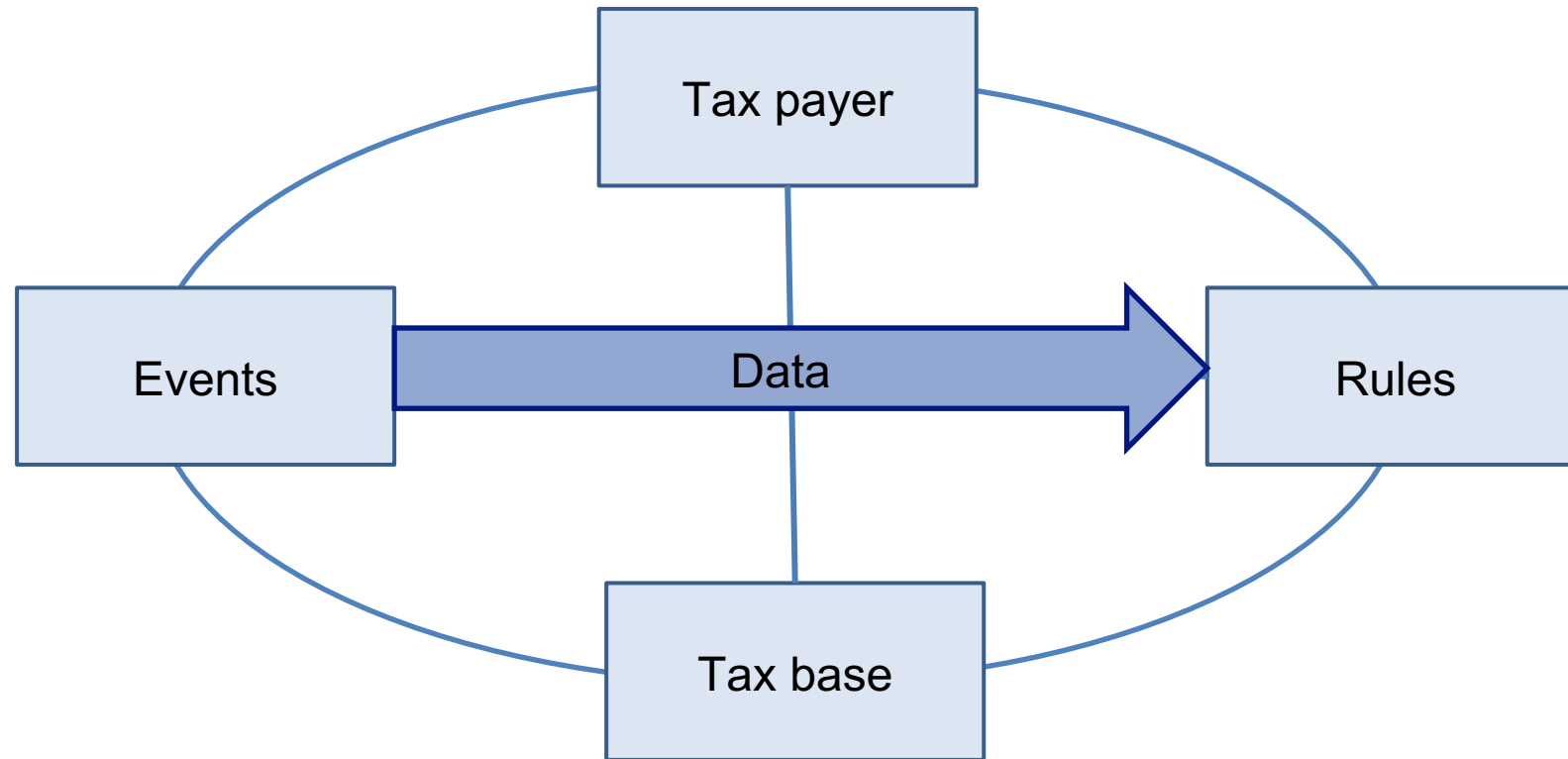


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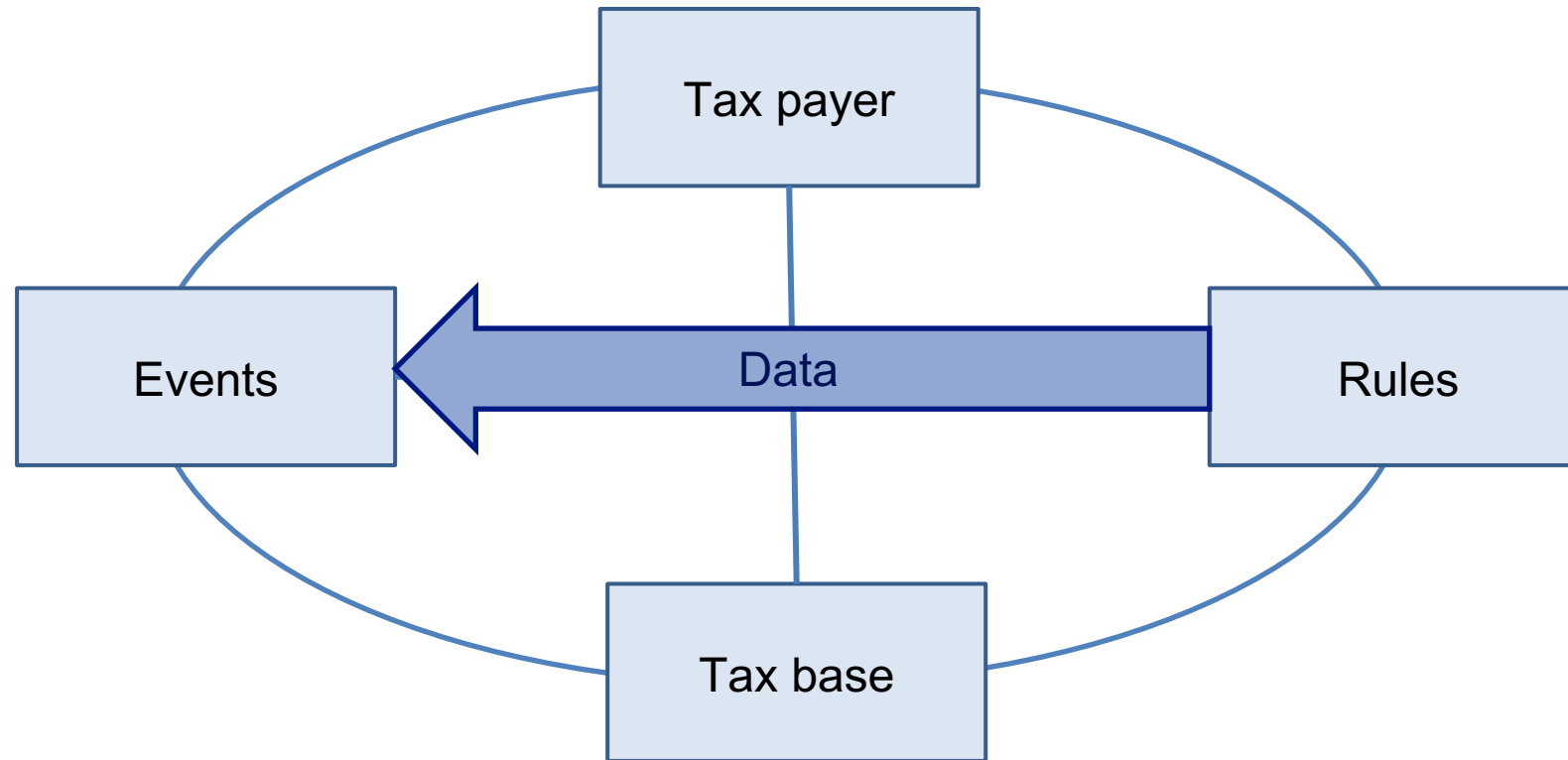
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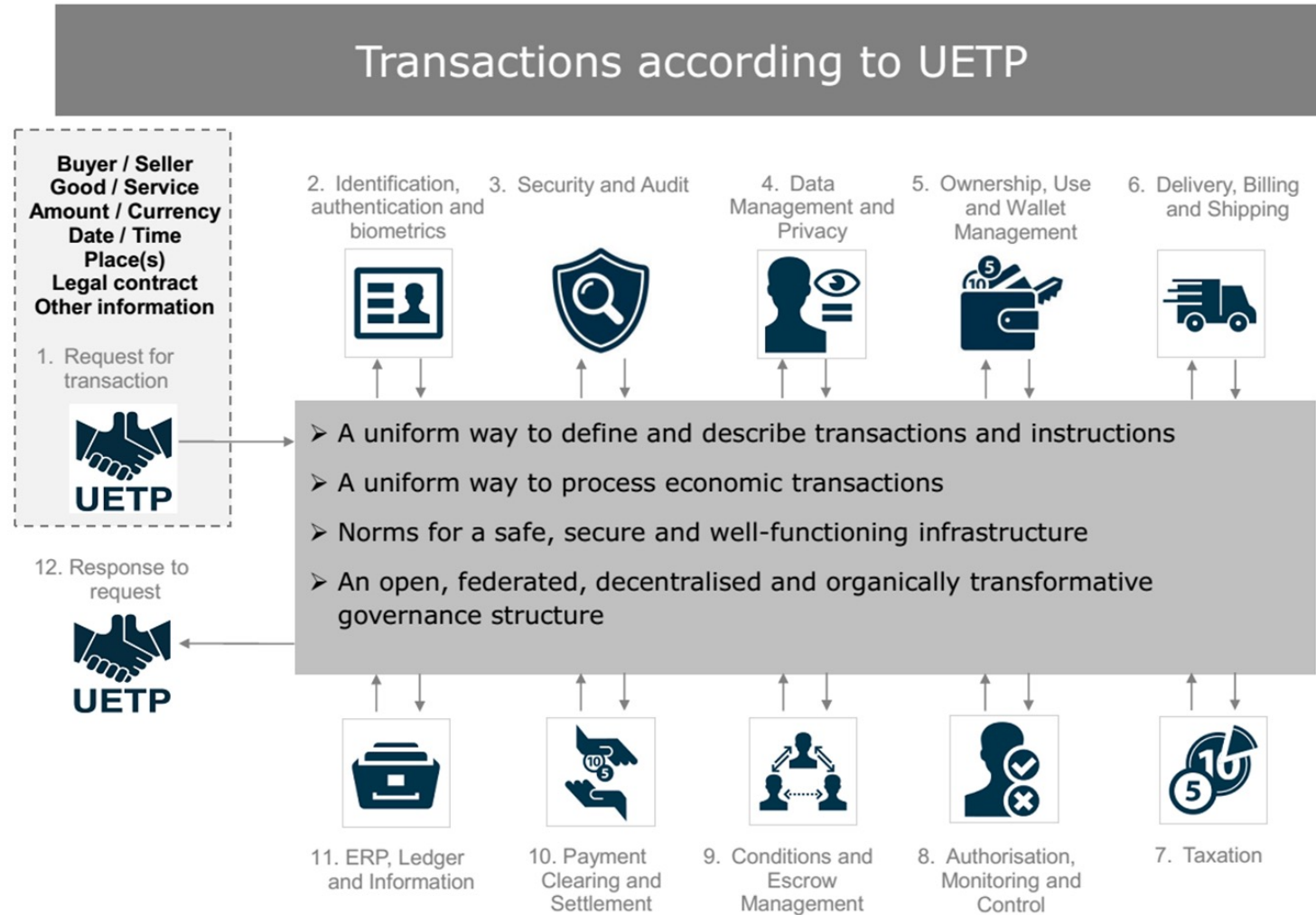
Data to the rules



Rules to the data



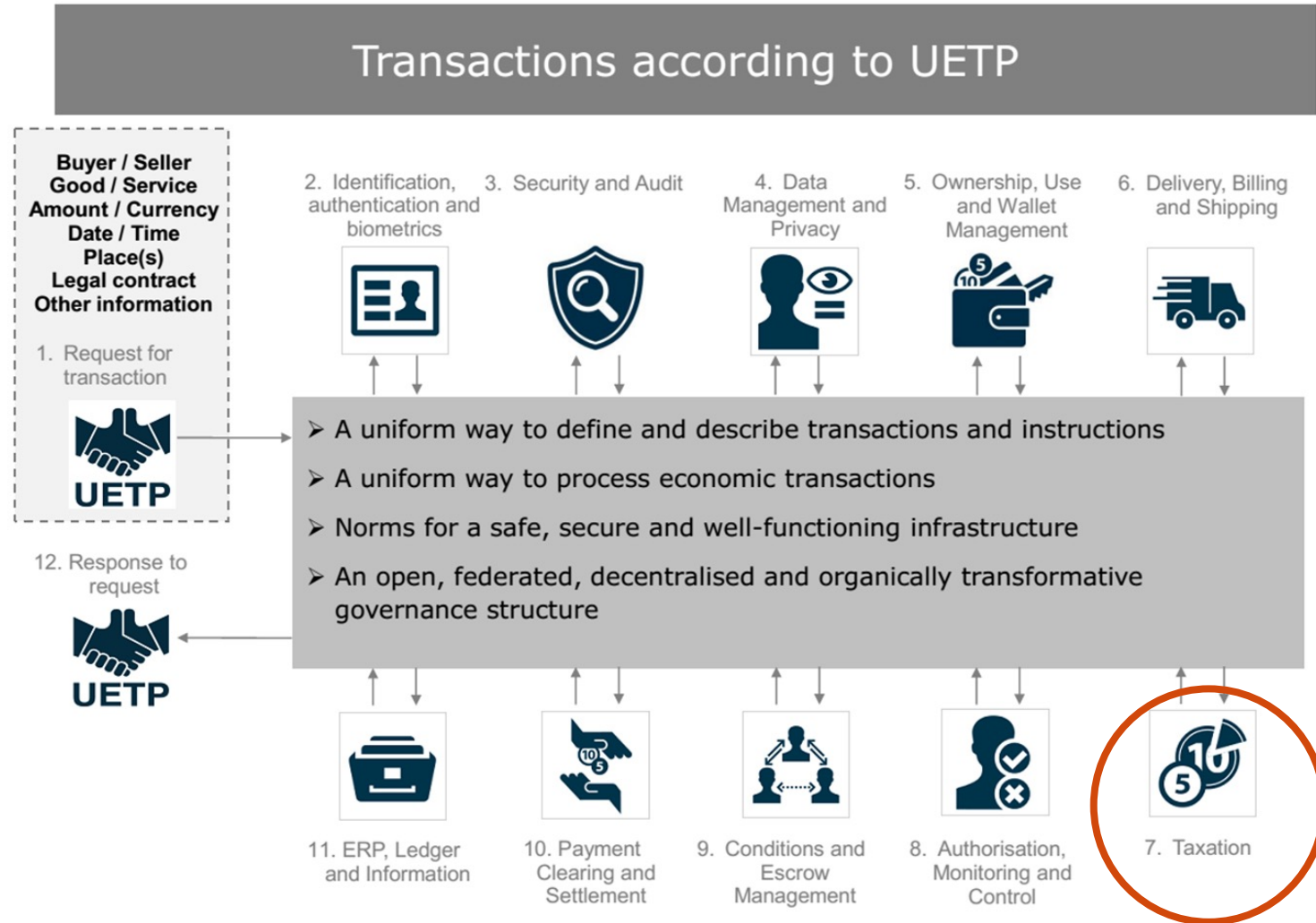
Tax-inclusive business transactions



Unified
Economic
Transaction
Protocol

Source: Floris Kleemans,
Focafet Foundation

Tax-inclusive business transactions



Unified
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Paradigm shifts – Mechanisms of change

- Rules to the data
 - *instead of* data to the rules
- Towards ‘tax-inclusive’ networks
 - *instead of* hierarchical bureaucracy
- Embracing complexity
 - *instead of* fighting complicatedness



Questions?



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Part 2 – Tax Administration 3.0

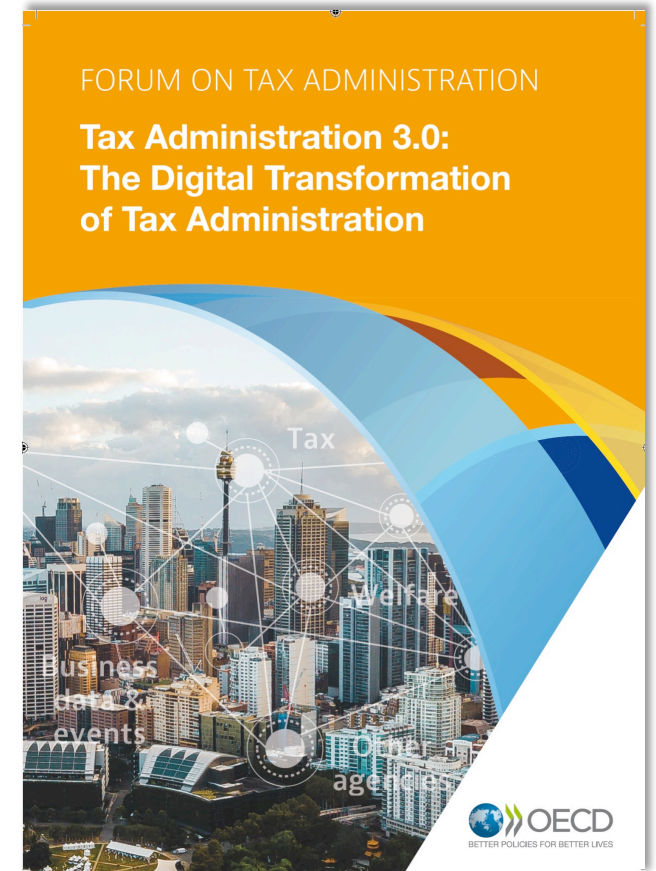


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OECD Forum on Tax Administration

A Vision on the Future of Tax Administration

- Reimagining of tax administration in the digital age
- Foundation for a longer term (5 – 10 years) FTA digital work program
- Guiding domestic strategy design
- A basis for collaborative actions



(OECD, 2020)

Setting the Stage – Burning Platform

- **Current digital tax administration instruments** are losing effectiveness:
 - The ability for current service offerings and enforcement tools to narrow *tax gaps* substantially
 - Heavy reliance on voluntary compliance - Scope for *errors* and *failure to take care*
 - The difficulty of making further substantial reductions in *compliance burdens*

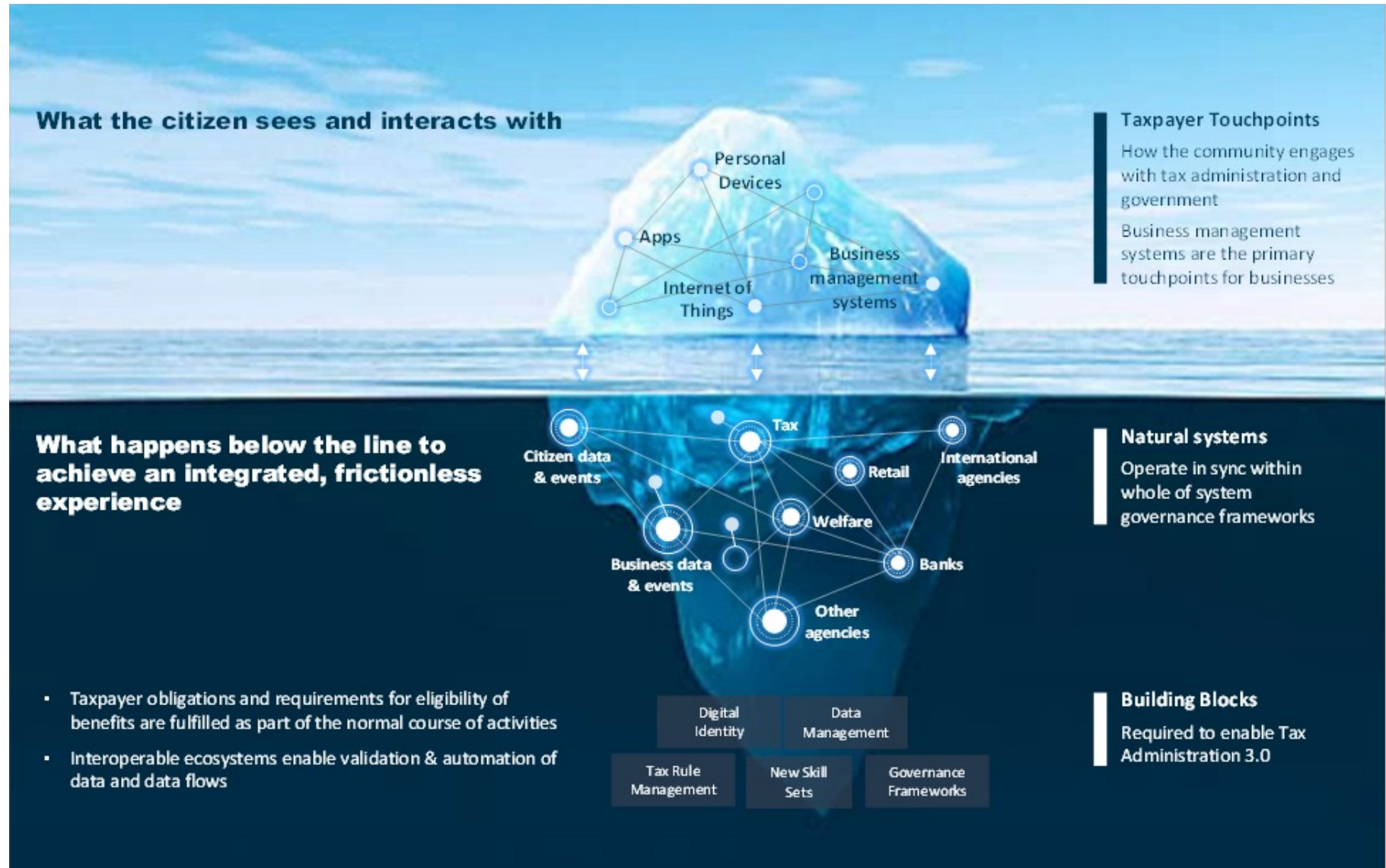
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 - The difficulty of making further substantial reductions in *compliance burdens*
- **New challenges** testing the current system
 - Accessing and using *information* in the light of changing work patterns, changing business models and digital assets
 - Changing societal *expectations* about joined-up government processes
 - Privacy, security and transparency concerns around the use and control of *large data sets*

Vision

Towards
seamless
taxation

Tax just
happens



Source: OECD

Vision, Tax Administration is increasingly:

- Embedded within taxpayer natural systems
- Part of a resilient “system of systems”
- Real-time tax certainty provider
- Transparent and trustworthy
- An integrated part of whole of government
- A human touch and high tech adaptive organisation

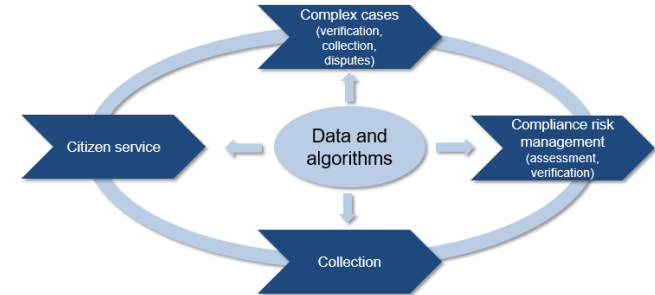
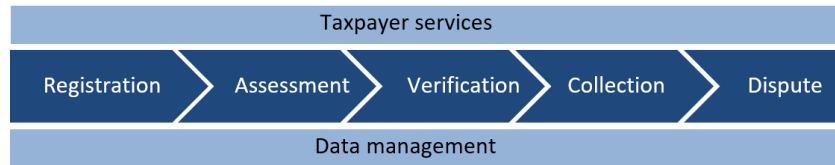
Vision: Aspirational stages



Description	Emerging	Progressing	Established	Leading	Aspirational
Taxpayer Touchpoints Descr Digita	<p>The majority of taxpayer engagement is supported by paper documents to be presented at the tax office.</p> <p>Tax administration website publishes tax laws.</p> <p>Cash tax payment is broadly supported.</p>	<p>Electronic forms can be downloaded from the website.</p> <p>Some first online filling functions implemented.</p> <p>Call center in place.</p> <p>Payment via electronic banking applications.</p>	<p>The website offers a joined-up suite of e-services.</p> <p>Private and business taxpayers have a personal account to check status updates and conduct transactions.</p> <p>Digital PAYE-like systems implemented.</p> <p>Accessibility for disabled and (digitally) illiterate assured.</p> <p>Digital payments for all transactions and tax types available.</p>	<p>Full pro-active pre-filing for individuals and some business taxes.</p> <p>Taxpayer services like registration and debt management integrated within a whole of government approach.</p> <p>First touch point integration into digital platform functions.</p> <p>Settlements based on taxpayer account basis, balancing debts and contributions.</p>	<p>The majority of taxpayer touch points integrated in natural systems and whole of government services.</p> <p>AI-support integrated in touch point service provision.</p> <p>Real-time settlement option available for the majority of tax liabilities.</p>

Source: OECD

Key messages



- Burning Platform *challenges the current system*
- Digital transformation will have *systemic* impact
- Paradigm shifts guide *reimagining of tax administration in the digital age*

The Example of the Driverless Car



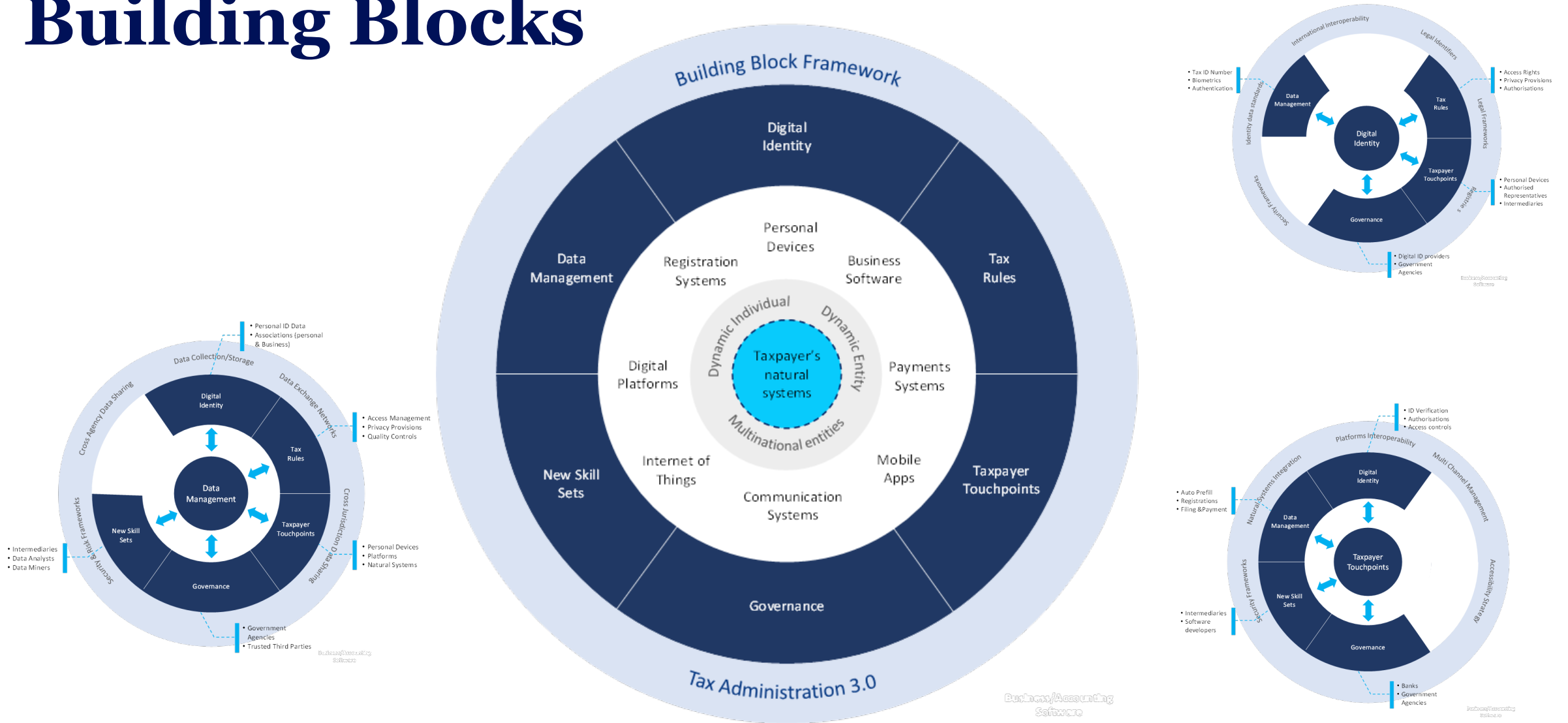
Preliminary requirements
Rules and regulations
Enforcement processes
Voluntary compliance by drivers



Decision support systems
Sensors picking up information
Integration with external data sources
Compliance-by-design driver systems

Source: OECD

Building Blocks



Source: OECD

TA 3.0 Action Plan 2021 - 2022

- **Maturity Assessments**

- Digital Transformation Maturity Model (1)
- Inventory of Tax Technology Initiatives (2)

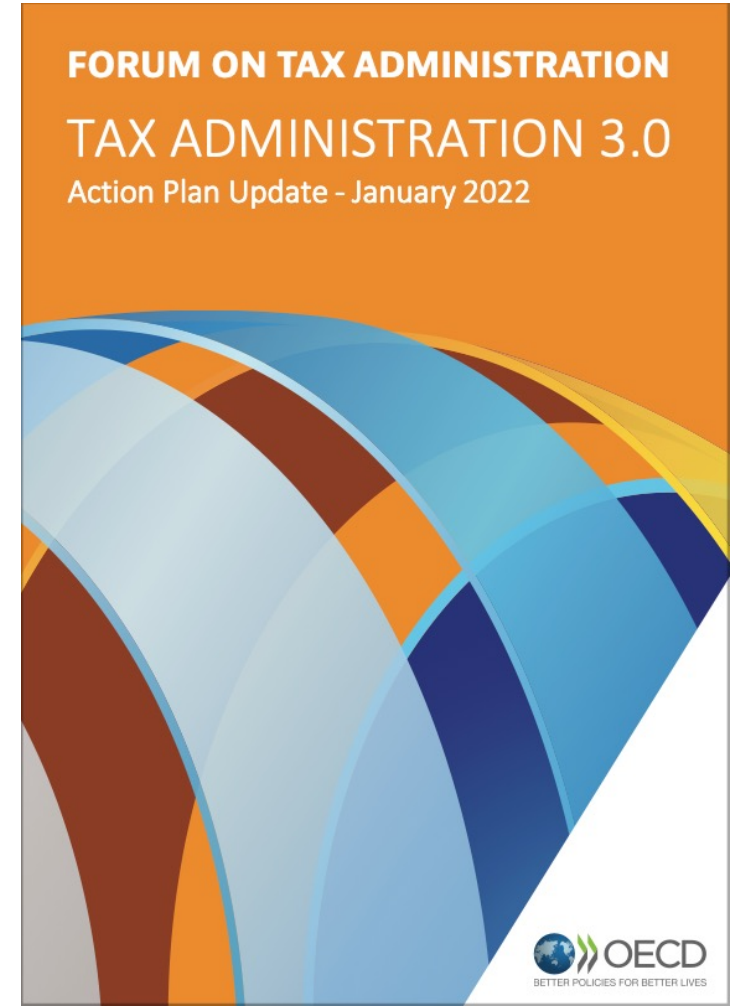
- **International solutions**

- Global digital identification (3)
- Global e-invoicing solutions (4)
- Including taxation processes in taxpayer natural systems (5)

- **Capacity building and Information Sharing**

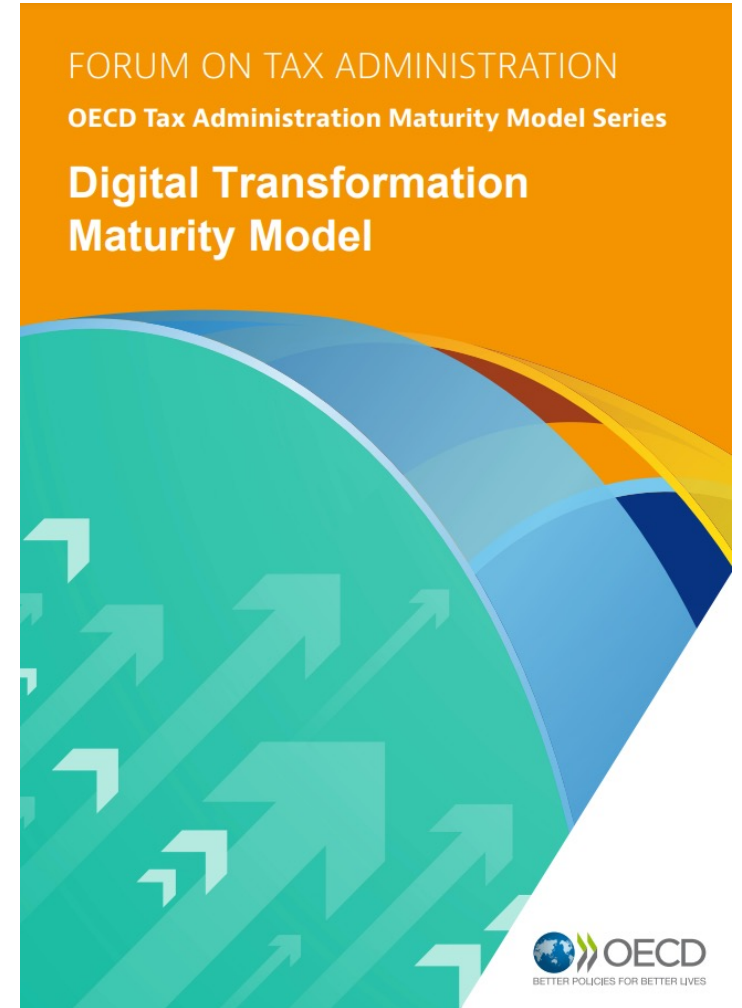
- Support for the digitalisation of developing countries tax administrations (6)
- Knowledge sharing group (7)

- TA3.0 Building Block Based



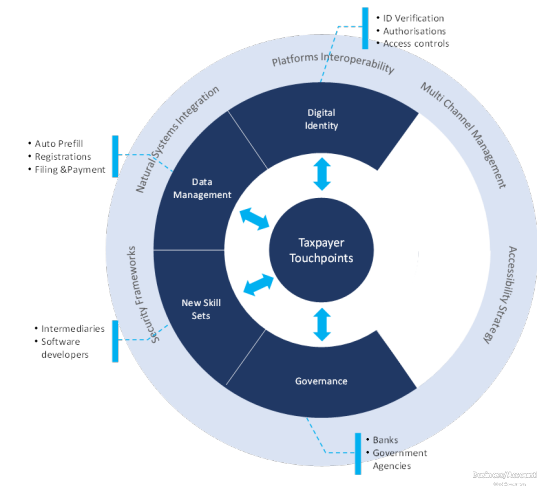
Digital Transformation Maturity Model

- Detailed TA3.0 Building Block descriptions
- Related to five maturity stages
- Self assessment tool:
 - Current position
 - Focus areas and next steps
 - Peer-to-peer learning
- Already used by 55 jurisdictions



Taxpayer Touchpoints Path of growth

- Moving from paper-based via websites and portals towards seamless integration, embedded into taxpayer natural systems.
- Shifting from re-active to responsive and pro-active taxpayer engagement support.
- Continuous enhancement of awareness and abilities to support inclusiveness and accessibility.



Taxpayer Touch point – Maturity levels

Taxpayer Touchpoints	Emerging	Progressing	Established	Leading	Aspirational
Descriptor	<i>General information and downloadable forms are provided on the administration's website although this can be difficult to navigate and may not be regularly updated. A large number of interactions can only be performed through tax offices and/or on paper.</i>	<i>A professionally designed website and call centers are the primary means of interaction with the tax administration. Some self-service options for e-filing and payment are available although many interactions still require paper or in-person contacts.</i>	<i>Taxpayer portals and direct connections with business management systems are increasingly used, with e-services available for the main interactions with the tax administration. Personalised interactions are increasingly done electronically and the use of self-service solutions is growing.</i>	<i>Taxpayer accounts and embedded functions in business software are increasingly a one-stop-shop for interaction with the tax administration. The number of tax administration processes and related touchpoints capable of being integrated into taxpayer natural systems is increasing as a suite of APIs has been developed.</i>	<i>In most cases taxpayer touchpoints are fully integrated into taxpayers' natural systems with an increasing use of AI to assist in dealing with ambiguities and anomalies. Taxpayer touchpoints are increasingly able to be used in cross-border situations.</i>
Indicative Attributes					
Types and uses of taxpayer touchpoints	The tax administration website contains general information on tax obligations, although this may not be regularly updated. An increasing number of forms are available for downloading. Some information can be obtained on request over the phone, but the primary channel for taxpayer engagement is the local tax office, including for the filing of most tax returns and payment of tax. Communication with taxpayers is generally done by letter, phone or physical interactions.	The main taxpayer touchpoints are the administration's website and call centres. The website is professionally designed and contains all common forms needed by taxpayers, which can be downloaded and sent by electronic means. A wide range of guidance is available on the website. Digital facilities for voluminous e-filing from business systems are becoming available. However, for less usual cases it is necessary to communicate with the administration outside of the website.	The primary individuals' taxpayer touchpoint remains the administration's website although there is increasing use of personalised communication through the use of email and texts as well as through taxpayer portals and web chat facilities. Businesses in most cases can file VAT and salary tax returns digitally, often via business systems interfaces (like API's). Call centres remain in use although there is a strategy to shift taxpayers to self-service channels. Taxpayers can complete most routine processes such as filing, payment and applications online.	The primary taxpayer touchpoints are contained within taxpayer accounts which can also be accessed from one-stop solutions (e.g. mobile applications and cloud-based business management suites, etc.) and increasingly use native features of the relevant devices (such as cameras, reading of QR codes and biometrics). Taxpayer accounts contain up-to-date information on tax assessments as well as general and personalised communications. Self-service channels supported by real-time assistance (such as chat bots) are increasingly used across the administration with some supported by artificial intelligence	Taxpayer touchpoints are incorporated within taxpayers' natural systems. This provides for increasingly seamless interactions which for most taxation processes is done on a machine-to-machine basis, including increasingly across borders. This includes relevant updates affecting taxpayer status, for example changes in income, taxable status, tax rates and rules. Real-time settlement options are available for the majority of tax liabilities. Options for human interaction remain and are transparent and easily accessible.

Taxpayer Touch point – Maturity levels

Taxpayer Touchpoints	Emerging	Progressing	Established	Leading	Aspirational
	The design and content of the administration website is done by individual tax administration functional areas rather than across the tax administration as whole and is not always regularly updated or cross-check.	The administration has a strategy to increase the availability of e-forms which can be processed online, some of which are already available. Electronic banking options are increasingly supported. The tax administration creates and distributes standards enabling the digital interfacing with business management systems.	The administration has a strategy to understand and develop taxpayer touchpoints based on analysis and feedback from taxpayer groups. Some self-service and pre-filing solutions have been developed, whether by the administration or by external developers using a small number of APIs made available by the administration, in particular for filing of PIT, CIT and VAT returns and communications.	The tax administration publishes a library of APIs covering a wide range of administration functions to increasingly enable taxation processes and related touchpoints to be incorporated into taxpayers's natural systems (i.e multi-channel). This also enables joined-up services with other government websites and applications, supporting options for realtime transaction processing based on insights gleaned from whole-of-government customer journey mapping.	The design and implementation of tax administration touchpoints is an integrated part of societal systems' development processes (i.e omni-channel). Artificial intelligence support is increasingly integrated into taxpayer touchpoints to provide prompts and recommendations for actions the taxpayer may wish to take or information they may wish to review as well as to highlight possible mistakes and options for obtaining further information in complex cases
Accessible services	Taxpayers can generally access services or request assistance/consultation through tax offices. Few formal facilities are available for taxpayers without the ability to read or for those without a computer or internet, and a lot of assistance is de facto provided informally and may not be consistent nor high-quality.	All digital services are still available via paper supported processes. Therefore, no specific digital accessibility measures are implemented. Website design does not have open support for the visually impaired. Some remote service support is available to taxpayers without access to digital channels or who have special circumstances, including through call centers or within the tax office.	Digital accessibility has become part of the tax administration's touchpoint strategy. Governmental and societal frameworks guide the design of user friendly and accessible digital services although requirements are not met in all cases. Special interest is given to specific taxpayer groups who struggle to use digital services. This includes the continued support of paper processes and the engagement with government advice centres, civil society and informal networks.	Digital accessibility is a cornerstone of the tax administration's digital service implementation strategy. For business taxpayers a suite of self-service solutions (e.g. user friendly apps, software tools and webforms) is available. All digital services align with open international accessibility standards. Specific interest groups are serviced in close cooperation with public and private stakeholders, thus assuring a growing alignment with taxpayer natural systems, including those of a non-digital nature	Because the majority of taxpayer services is part of taxpayer natural systems, accessibility by design is generally assured. Where it is not yet possible to incorporate all touchpoints into taxpayers' natural systems, advanced analytics and behavioural insights are used to prompt and assist with the flow of relevant information in the light of the taxpayers' circumstances and preferences.

Taxpayer Touch point – Maturity levels

Taxpayer Touchpoints	Emerging	Progressing	Established	Leading	Aspirational
	<p>Although most services are being delivered at the tax office by tax administration staff, there is no formalised client centered culture in place and there is limited flexibility to respond to difficult cases. In case of disputes or process flaws, taxpayers can experience challenges while trying to exercise their legal rights.</p>	<p>The administration culture is increasingly focused on supporting taxpayers. Taxpayer dispute and complaints processes are not supported digitally. Errors in digitally filed forms generally have to be corrected via paper processes. Tax administrations start to digitally facilitate tax practitioners in their support of taxpayers, e.g. by offering email facilities and specific call center options.</p>	<p>The tax administration has adopted a customer-centric approach, although this may not be consistently recognised by taxpayers. The majority of appeal and objection procedures are digitally supported and both case and progress information can be accessed via taxpayers personal portals. Taxpayers who want to address specific complicated issues may run into problems in respect of standardised digital PIT and VAT processes. Tax practitioners are being supported by a suite of digital services.</p>	<p>Tax administration works to the principle of taxpayer-centric design. 'The human in the loop' is a key design and fall back principle of all digital services implemented. Compliance by design solutions help diminish errors and disputes. More complex cases are being identified and adressed at an early stage and settled via human intervention if needed.</p> <p>Tax practitioners are still an important channel for some tax administration services, although there are a growing number of pre-filled services and integrated cloud-based business systems.</p>	<p>Tax administration, like other parts of government, is focused on reducing burdens on citizens through the introduction of seamless services and processes, meeting or exceeding accessibility standards. In all circumstances taxpayers can intervene and challenge tax administration processes and decisions; in most cases via natural systems touch points and trusted third parties. Al-augmented systems support both taxpayers and tax administrations in jointly creating upstream tax certainty and the prevention and settlement of disputes.</p>

Source: OECD

TA 3.0 Action Plan 2021 - 2022

- **Maturity Assessments**

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- Inventory of Tax Technology Initiatives (2)

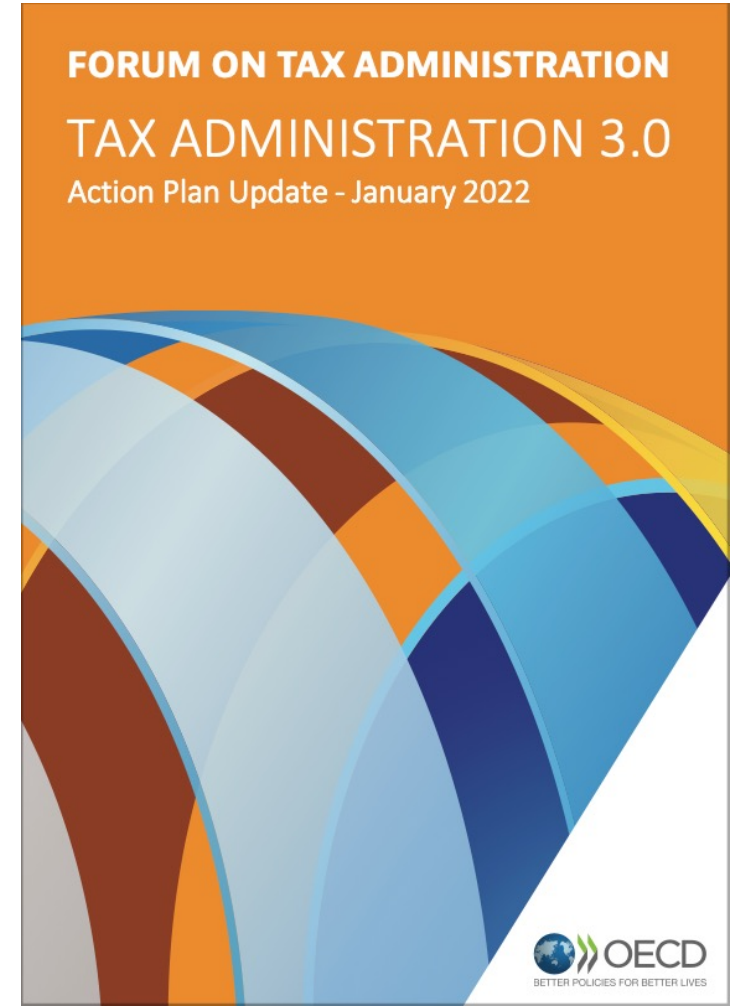
- **International solutions**

- Global digital identification (3)
- Global e-invoicing solutions (4)
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- **Capacity building and Information Sharing**

- Support for the digitalisation of developing countries tax administrations (6)
- Knowledge sharing group (7)

- TA3.0 Building Block Based



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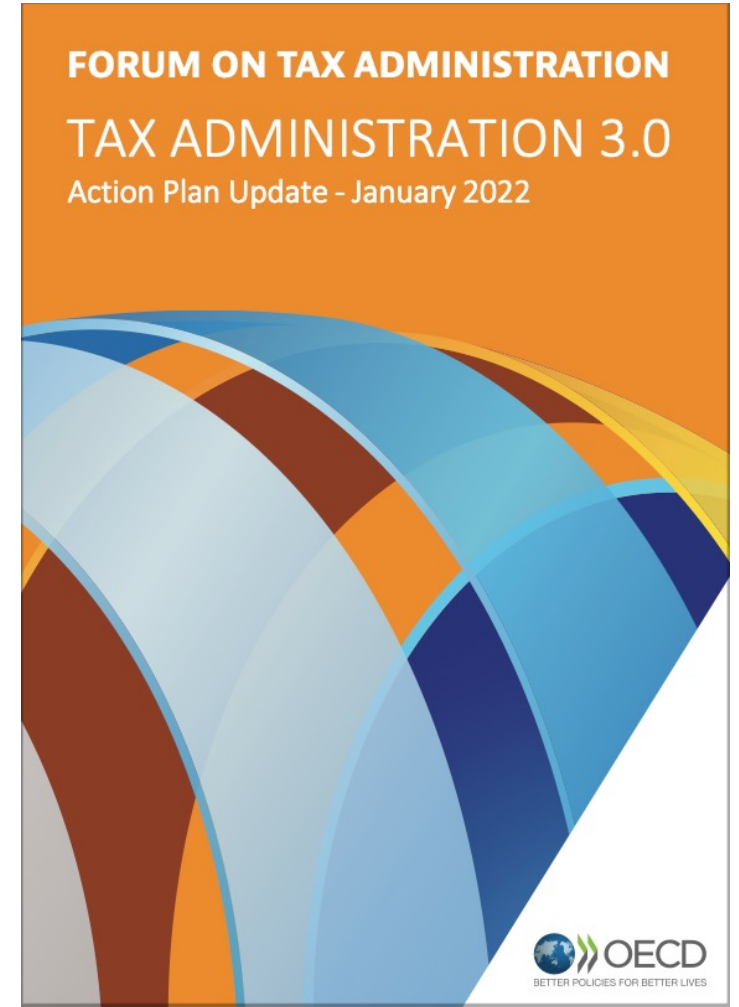
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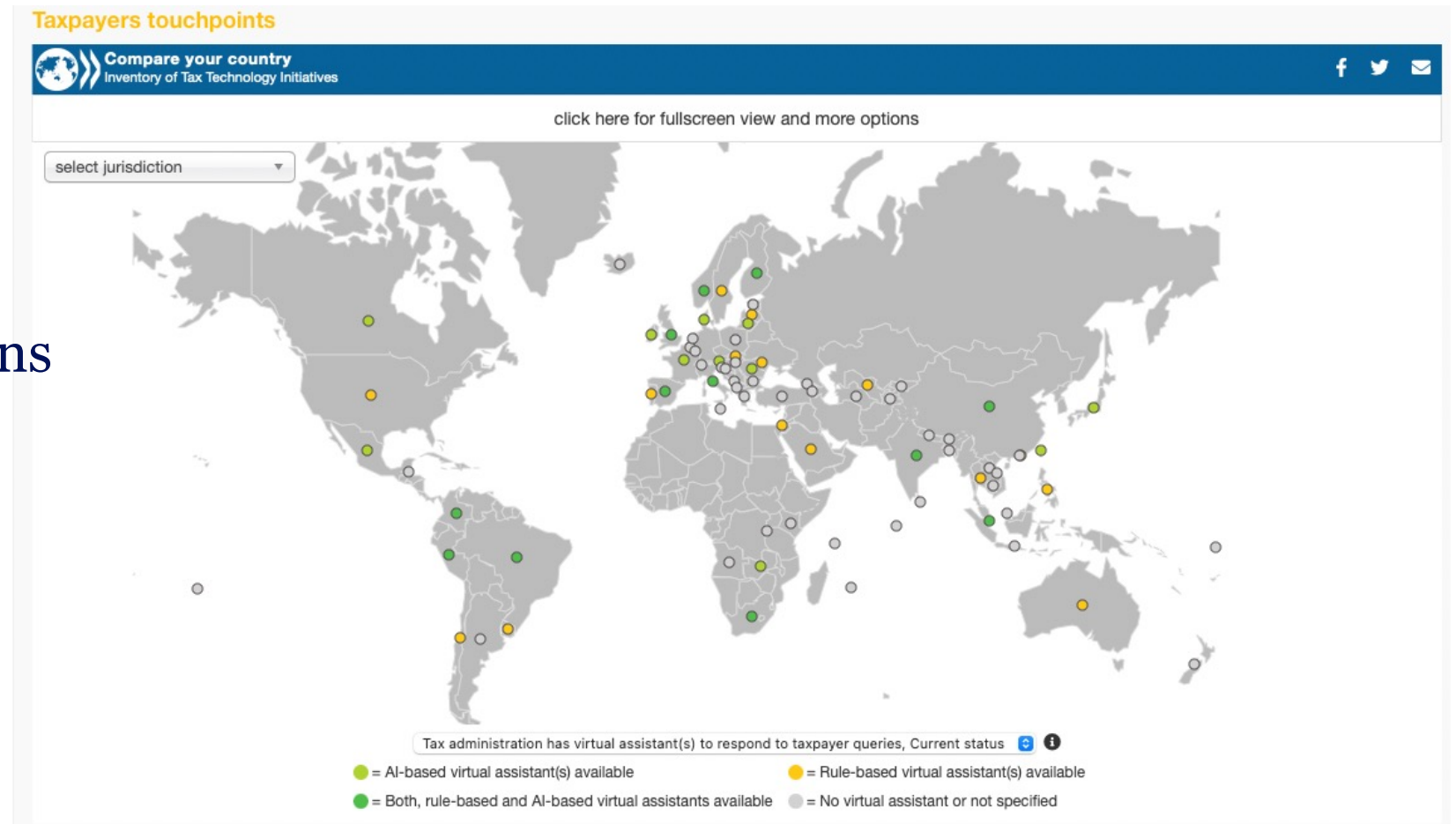
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Inventory of tax technology initiatives



Global Survey

75 responding jurisdictions

Visualisations per:

- TA3.0 Building Block
- Tax Type

<https://www.oecd.org/tax/forum-on-tax-administration/tax-technology-tools-and-digital-solutions/>

Next Phase – FTA Sydney Plenary 2022

“We agreed a new **strategic framework** to govern the second phase of our collaboration, involving:

- The creation of a new senior-level expert working group, open to all our members, as well as closer working with key external stakeholders ...
- The early scoping of a possible pilot for real-time cross border exchange of information with sharing and gig economy platforms ...
- Exploring the use of new technology tools to assist with implementation of the Two-Pillar Solution.
- Continuing to support knowledge sharing on digital transformation through the promotion of the Digital Transformation Maturity Model, ... and the new web-based Inventory of Tax Technology Initiatives.”

<https://www.oecd.org/tax/forum-on-tax-administration/events/2022/forum-on-tax-administration-communique-2022.pdf>

Questions?



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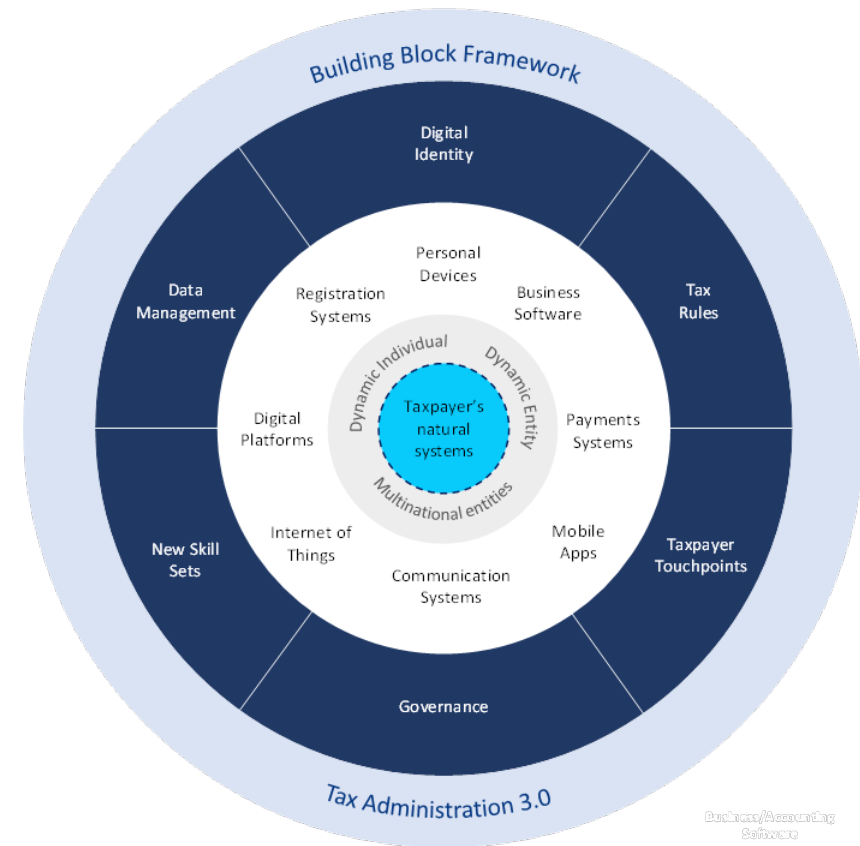
Part 3 – Towards Tax Administration 3.0



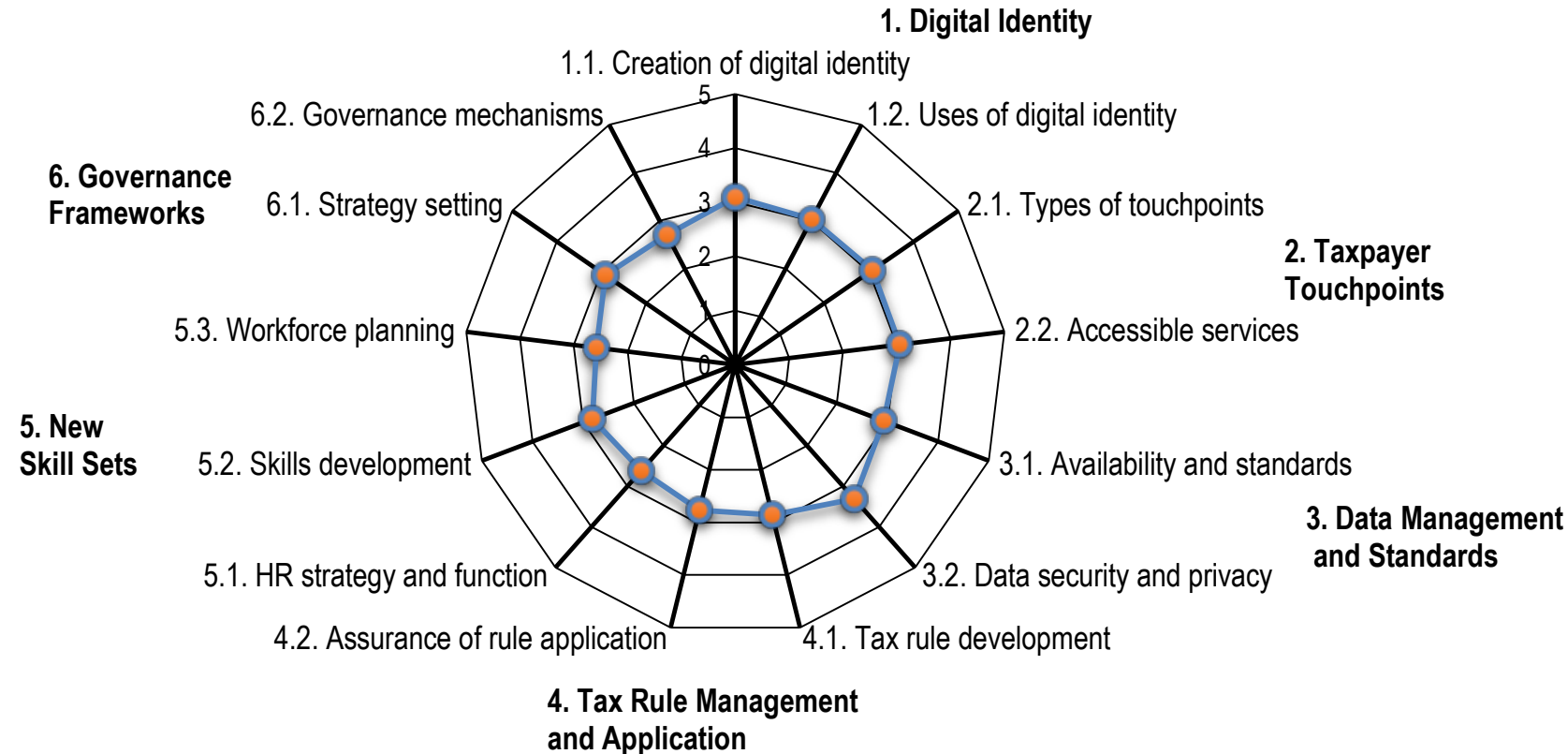
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Starting position

- What is your tax administration's level of maturity?
 - Per Building Block
- Continue *digitalisation*, or
- Start *digital transformation* journey?
- Together with a fellowship of peers?



Overall starting position



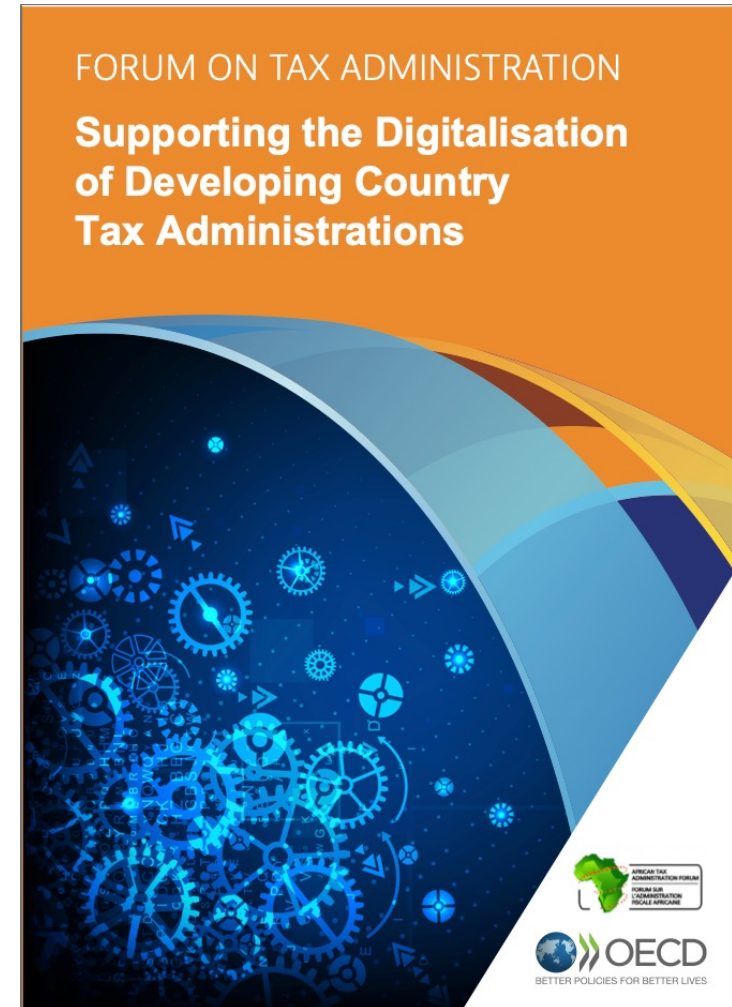
Source: OECD, FTA Digital Transformation Maturity Model

Analysis

- Few tax administrations fully score Established+
 - Relative small group of 'leading' front runners
 - More than half of respondents have building blocks at three levels of maturity
- Tools seem ready, people need attention:
 - New Skill sets
 - Culture, change management
- Key transformational drivers are lagging behind:
 - Tax rule management
 - Governance framework

Next steps towards Tax Administration 3.0

- Determine your starting position
 - Conduct a Maturity Model Self-assessment
 - Let the Inventory make you aware and inspire you
 - Assess internal and external capabilities
- Design your domestic Digital Strategy
 - Digitalisation or Digital Transformation?
 - Aim for balancing scores
 - Be aware of the human factor
- Implement
 - Peer-to-peer assistance
 - e.g. FTA Tax Administration Without Borders
 - Together with external stakeholders



<https://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/supporting-the-digitalisation-of-developing-country-tax-administrations.pdf>

Questions?



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