

# IATA: Technology driven tax functions

October 2024 Andrew Burman, Principal, Transformation & Automation

### AGENDA

- > Evolving tax authorities, businesses, tax functions
- > Key definitions
- How fast technology is evolving
- > Opportunities & issues
- Case studies
- > Key themes
- > How to get started

### HOW TAX AUTHORITIES ARE CHANGING

Real-time reporting

Data centric (AI driven audits)

Cross-border data sharing

Dynamic testing models

New taxes, e.g. environmental, transactional taxes

IT integrations with taxpayers

Lack of alignment across jurisdictions (e-invoicing)

### CONSTANT BUSINESS CHANGE



### THE MODERN TAX FUNCTION



### Effective use of technology which is integrated with the rest of the business is essential

### **KEY DEFINITIONS**

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#### Natural Language Processing (NLP)

A machine learning technology that allows computers to understand and communicate with human language



### **Machine Learning**

A subset of AI based on developing algorithms based on trends and themes, which enable computers to learn and make decisions with experience.

#### **Artificial Intelligence (AI)**

The simulation of human intelligence in machines to perform a range of required tasks.



#### **Deep Learning**

A subset of AI which leverages learned patterns to allow for accurate predictions by exposing networks to vast amount of data

### **Generative AI**



Deep learning models that can generate high-quality text, images, and other content based on the data they were trained on



### ....also:

- Robotic Process Automation
- Automated data processing
- Data lake/storage
- Blockchain

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### HOW FAST TECHNOLOGY IS EVOLVING

57%

83%

65%

2x

\$3.8 trillion

12x 12,000x

Number of internet users

Increase in data created per year

33x

Cloud data storage



Growth in analytics market

Of organisations expect an increase in their tax reporting and compliance responsibilities over the next 2-3 years

Companies that reported use of AI as a top priority

The AI markets projected growth by 2035

Proportion of businesses who are already using generative AI (2x 2023) – but most organisations are only using in 1 or 2 functions (mostly marketing, sales)

The rate Al's computational power grows every 6 months

2000





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# **OPPORTUNITIES & ISSUES**



# EXAMPLE - AIR PASSENGER DUTY (APD)

#### **Current Process**

- > Flat rate per ticket (varies by jurisdiction)
- > Method of payment varies by country (e.g. Included in ticket price, paid at airport)
- > Periodic reporting/payment requirements by jurisdiction

#### Future?

- Airlines required to remit the taxes on behalf of tax authorities?
- Tax automatically reported, collected in real time?
- > APD discounts from environmental incentives?







Predictive analytics to predict movement in tax rate

Calculating/adding taxes and monitoring regulation changes

# EXAMPLE - ENVIRONMENTAL TAXES

#### **Current Process**

- > Airlines purchase carbon credits
- Purchased when exceeding a certain limit
- > Flat rate per ton of Co2 emitted
- > Frequency of emission reports vary by jurisdiction

### Future?

- Increased environmental focus, complex tax base?
- New structures for aircraft financing and taxation (fuel efficiency, hybrid/electric etc.)?
- Enhanced per passenger emission taxes/frequent flyer levy?



# FUTURE- DATA MASTERY



# AI DRIVEN DATA & KNOWLEDGE MANAGEMENT $\langle \hat{\mathbb{P}} \rangle \leftrightarrow \bigoplus$



AI to monitor, analyze, predict, notify

# IMPLEMENTING AI





- First, define purpose
- Data what, where, when, how
- Model Complexity
- Bias Considerations
- Integration with source systems
- Leverage existing projects/IT?
- Stakeholders?
- Capture budget CBA



### ...and measuring Success

- Tax function performance metrics
- Broader business Impact
- Technical Metrics
- Risks avoided operational, compliance, regulatory, etc...
- Commercial opportunities?
- Timing, quick wins vs longer term value
- Risk of doing nothing?

### HOW TO GET STARTED

### Roadmap



**Proof of Concept** 



### Keep in mind:

Stakeholder engagement is key

See what you can leverage - IT, other projects

Pool, don't replicate, data – no silos

Requirements first, then potential solutions

If not now, when?

# THANK YOU - ANY QUESTIONS?



Andrew Burman

Principal, Transformation and Automation

+44 (0) 20 8176 8349 Direct +44 (0) 7467 441 477 Mobile

andrew.burman@ryan.com www.ryan.com/europe

Connect on LinkedIn at: /andrew-burman-transformation