

# Digitalisation and Artificial Intelligence

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# Overview of Tax Digitalisation in Hong Kong

- **From 1993 to 2018, two Information Systems Strategy Plans and one Departmental Information Technology Plan**
- **Since 2020 and up to 2025, major projects to modernise system platform and further digitalise the tax administration in Hong Kong, including the implementation of new Tax Portals to strengthen electronic filing and other taxpayer services, leveraging of cloud services, office automation, etc.**



# Hong Kong's Experience in Tax Digitalisation

- **eTAX:** eTAX platform allows taxpayers to file tax returns, make payments, and access tax-related information online
- **Auto-filing of tax returns:** auto-fill feature populates taxpayers' tax returns with pre-filled data, minimising manual entry
- **Digital payment options:** adoption of digital payment methods, such as e-wallets and online banking, has made it easier for taxpayers to fulfil their tax obligations
- **iXBRL filing:** supporting documents such as financial statements in iXBRL format can be e-filed together with Profits Tax returns with a view to achieving full-scale implementation of mandatory e-filing



# Tax Digitalisation Projects (2020 to 2025) (I)

➤ **Total Commitment: HK\$742M (US\$95M)**

➤ **Development of Tax Portals**

- Collect digital financial and tax data through iXBRL
- Facilitate electronic filing for Profits Tax returns together with supporting documents
- Deploy mobile technology on Individual Tax Portal for mobile access
- Enable tax representatives to electronic filing on behalf of their clients through Tax Representative Portal



# Tax Digitalisation Projects (2020 to 2025) (II)

## ➤ **Extension of Workflow Technology**

- Automate process of certain property tax claims to streamline submission and processing of such claims
- Simplify process for de-registering companies
- Facilitate submission and processing of individual allowance claims
- Manage cases of tax payment defaults
- Enable internal progress reviews





# Tax Digitalisation Projects (2020 to 2025) (III)

## ➤ **Migration to Cloud Platform**

- Leverage Government Cloud Infrastructure Services
- Rewrite applications for cloud integration
- Disaster recovery solution

## ➤ **Relocation**

- Relocate and re-provision more than 40 IT systems and facilities to new Inland Revenue Centre
- Enhanced network and security infrastructure
- Green elements in data centre and server rooms



# Use of Artificial Intelligence

## ➤ **Automatic Speech Recognition “Speech-to-Text” Technology**

- Advanced AI algorithms and machine learning convert speech to text by learning from data and user feedback
- Accuracy depends on number of languages used (Cantonese, Putonghua, English, etc.)

## ➤ **Optical Character Recognition (OCR) with AI**

- OCR with AI involves the use of AI algorithms to analyse and interpret images or scanned documents containing printed or handwritten text through learning from data and user feedback
- Accuracy depends on different styles of handwritten text






# Success Stories and Impact of Tax Digitalisation

- **Efficient processing:** Adoption of digital solutions has expedited tax processing, resulting in faster processing times
- **Enhanced compliance:** Electronic filing of tax returns and automated processes have improved tax compliance rates
- **User-friendly experience:** Taxpayers appreciate the convenience and user-friendly interfaces of digital platforms, leading to higher satisfaction levels
- **Cost savings:** Both taxpayers and tax authorities have experienced cost savings due to reduced paperwork and manual processes



# Lessons Learned and Best Practices of Tax Digitalisation

- **Collaboration:** Close collaboration between tax authorities, technology providers, and taxpayers is essential for successful digitalisation
- **User-centric design:** Digital platforms should prioritise user experience and be intuitive, making it easy for taxpayers to navigate and fulfill their tax obligations
- **Continuous improvement:** Regular updating and upgrading digital solutions ensures they remain relevant and are aligned with evolving tax requirements
- **Education and support:** Providing adequate training, resources, and support to taxpayers during the transition to digital platforms is crucial for smooth adoption



# Future Outlook and Opportunities of Tax Digitalisation

- **Data analytics:** Leveraging data analytics can enhance tax risk assessment and improve compliance efforts
- **Mobile solutions:** Developing mobile applications for tax-related activities can provide greater accessibility and convenience for taxpayers
- **Smart automation:** Embracing technologies like artificial intelligence and machine learning can automate tax processes and improve efficiency



# Potential of Artificial Intelligence in Tax Digitalisation

## ➤ **Better Tax Return Processing**

- AI can automate the processing of tax returns by extracting relevant information from paper records or digital documents
- AI techniques can be employed to understand the contents of documents and populate tax returns automatically

## ➤ **Enhanced Data Analysis and Pattern Recognition**

- AI can be used to analyse large volume of tax-related data, identify patterns, and detect potential tax evasion or non-compliance

## ➤ **Enhanced Taxpayer Assistance through Chatbots**

- AI-powered chatbots can provide real-time assistance to taxpayers, by answering common tax-related questions, guiding users through filing process, and providing clarifications on tax laws and regulations



# Conclusion

- ▶ **Hong Kong's experience in tax digitalisation has demonstrated the numerous benefits and positive impact it brings. By embracing digital solutions including use of artificial intelligence, we have achieved greater efficiency, accuracy, transparency, and compliance.**