

Data Quality Management

BRITACOM Seminar 3

~ Tax-related Data Governance and Application ~

Inland Revenue Authority of Singapore (IRAS)

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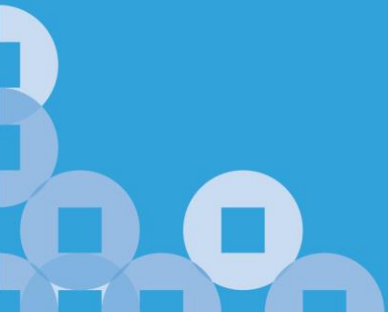
INLAND REVENUE
AUTHORITY
OF SINGAPORE

Outline

- **Tax administration in Singapore**
- **Data as Enablers**
- **Quality Data Management**



Tax Administration in Singapore



Tax administration in Singapore

Ministry of Finance (MOF)



- Oversees Singapore's fiscal policies to fund public spending and to support economic and social objectives
 - Drives and decides on tax policy matters



Inland Revenue Authority of Singapore (IRAS)



- Acts as an agent of the Government and provides service in the administration of taxes
- Advises the Government, and represents Singapore internationally, on matters relating to taxation

IRAS' Vision and Corporate Goals

Our Vision

- The leading revenue authority in the world
- A partner of the community in nation-building and inclusive growth
- A dynamic team of competent and committed people



Our Corporate Goals

Foster a competitive tax environment that supports inclusive growth

Provide excellent service

Maximise voluntary compliance

Enhance organisational and staff productivity

Achieve a high level of staff competence and satisfaction

Tax Administration Strategy

As an agent of the government in the administration of taxes, IRAS is committed to **collecting taxes efficiently**.

Taxpayers do not have a choice on paying taxes. Our approach is to make their **taxpaying experience simple and easy**.

One of the key strategies in IRAS is to leverage data to understand taxpayer needs, design efficient tax processes and to be enabled by technologies towards a state of **high voluntary tax compliance**.



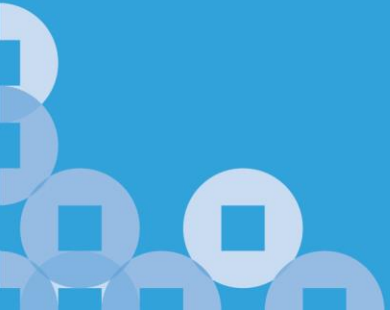
Our Core Beliefs

Our core beliefs on compliance and service:

- Taxpayers are generally compliant
- No-need-for-service is the best service



Data as Enablers



Data as Enablers

Good quality data is essential to support IRAS in

- carrying out tax administration functions
- delivering excellent service to taxpayers



It is also essential for the Whole of Government where good quality data allows IRAS to

- contribute towards the Whole-of-Government Integrated Data Management Framework
- provide government agencies with seamless access to quality data, to improve data exploitation.

Data Sources

We collect data from multiple sources.

Government Agencies



Non-Government Organisations

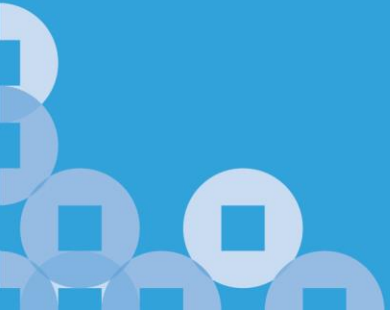


Commission
Paying
organisations

Employers
participating
in AIS



Quality Data Management



Data Acquisition Objectives

IRAS acquires data from Government agencies & non-Government organisations to

1. Update taxpayer information
 - to facilitate tax assessments
 - to identify and register taxpayers
 - to deliver personalised and anticipatory services
2. Pre-fill income and relief information in tax returns
 - to expedite finalisation of tax assessments
 - to support No Filing Service
 - to achieve high voluntary tax compliance
3. Become “Big Data & AI Powered” IRAS
 - to proactively shape and review tax policies and rules
 - to use rich insights from entity-centric data and AI applications to enhance processes and systems

Data Acquisition Guiding Principles

IRAS follows these Data Acquisition guiding principles to acquire the Right data from the Right source with Whole-of-IRAS (WOI) perspective

(1) Leverage Government Data Architecture (GDA) for Government Data

(2) Acquire data at source through external organisation's natural systems for **Non-Government Data**

(3) Acquire data from **Whole-of-IRAS (WOI) perspective**

(4) Ensure data acquired is **discoverable** for operational, analytical and longitudinal purposes

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[1] Leverage Government Data Architecture for Government Data (GDA)

- In 2018, the Government Data Office initiated the designation of Single Source of Truth (SSOT) for core data commonly used by agencies, and set up Trusted Centres to clean and fuse common datasets to facilitate the access, distribution and use among agencies.
 - With GDA, IRAS is able to acquire more quality data from a single source, reduce the need to maintain multiple connections with different agencies/ data sources.
 - IRAS also taps on the Whole-of Government data platforms such as MyInfo* and MyInfo Business*. We pre-fill personal and business entity data fields in G2C and G2B digital services forms with Government-verified data.
 - The Government established the “Tell Us Once” policy which helps to eliminate the need for individuals and business entities to repeatedly provide their particulars to agencies if such information have been provided before.
- * A one-stop repository of individual and business entity information, containing government-verified and user-provided data to share among the Government agencies to facilitate automated filling of digital services forms

Data Acquisition Guiding Principles

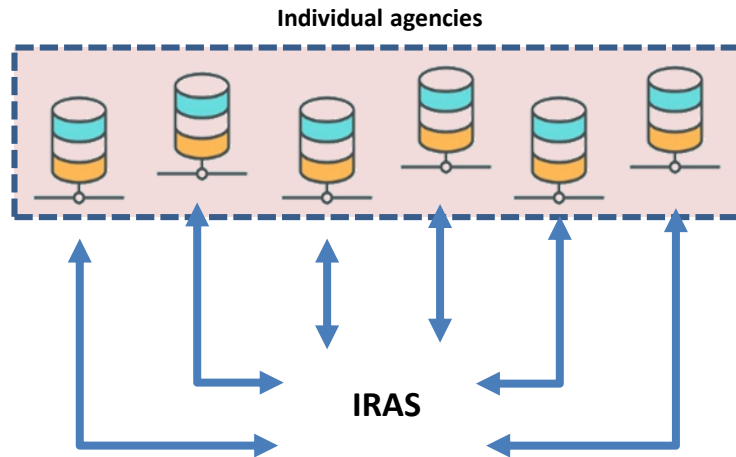
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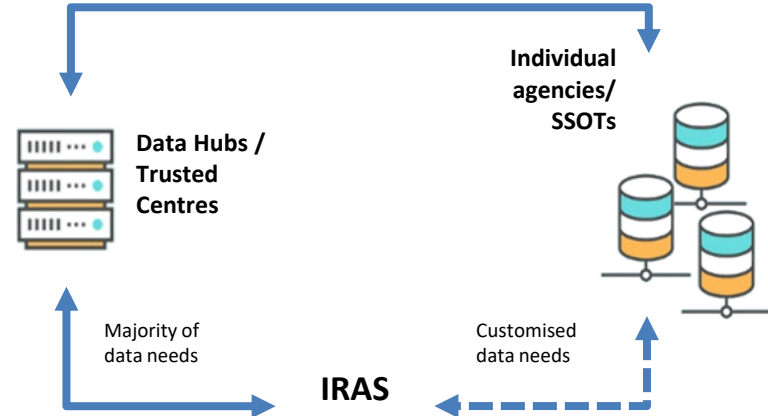
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Conventional Data Sharing process



Enhanced Government Data Architecture



* a one-stop repository of individual's and entity's information, containing government-verified and user-provided data to share among the Government agencies to facilitate automated filling of digital services forms

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[2] Acquire data at source through external organisation's natural systems for Non-Government Data

- IRAS obtains data at source from employers, IPCs*, Commission Paying Organisations and Taxi / Private Hire Car operators to pre-fill tax returns. This reduces compliance burden on taxpayers.
- We are expanding the scope to cover platform intermediaries to improve the compliance of platform sellers and exploring data acquisition via e-invoicing (PEPPOL).
- We collaborate and co-create with Software Developers to incorporate seamless filing features in their solutions. In this way, we acquire tax data seamlessly and directly from taxpayers' natural system.

* IPCs are Institutions of Public Character. Donors are able to claim tax relief based on the amount donated to the IPCs.

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[3] Acquire data from the Whole-of-IRAS (WOI) perspective

- The lack of coordination and consistency when acquiring data may result in duplication of effort in acquiring similar datasets. The lack of awareness of available data may cause users to miss out opportunities to exploit the data.
- We develop the following resources to enhance the coherence of data acquisition process and provide an overview of data available in IRAS.
 - a) Data Acquisition Guide – It assists users to acquire data in a consistent manner, and institute a process to incorporate other user's needs and acquire data with WOI perspective. Under the guide, users communicate newly acquired data so that other users could identify potential use cases early and maximise the value of the data.
 - b) Master Data Catalogue (MDC) – It is a central data register of datasets available in IRAS, acquired from government agencies and non-government organisations.
 - c) Data Needs Repository (DNR) – It is a central data register that keeps track of all work-in-progress data acquisition requests.

Data Acquisition Guiding Principles

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(4) Ensure data acquired is **discoverable** for operational, analytical and longitudinal purposes

[4] Allow data acquired to be discoverable for operational, analytical and longitudinal studies

- The Master Data Catalogue allows users to discover datasets available with IRAS for operational needs
- Data acquired are made available in data marts and data warehouse to facilitate discovery, datamining, analytical insights and development of AI models.

Principles of IRAS Data Quality Standards

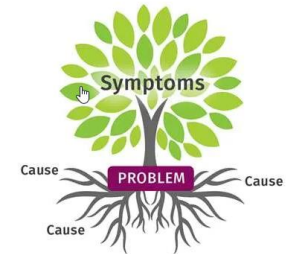


1. Apply it throughout data lifecycle – Data quality can be impacted by a range of lifecycle events. Data quality management is relevant across the data lifecycle, from acquisition to destruction. Eg. Newly acquired data is updated in the Master Data Catalogue to show all data available in IRAS.



2. Do it right from the start – Bring quality control upstream and automate processes by default. Set standards to validate data received before accepting it in IRAS system. Eg. Only date with *ddmmmyyy* format is updated in the system.

3. Solve data quality issues at the root - Address the root cause rather than solving problems symptomatically. Eg. Data errors due to system design gaps are addressed by cleaning all affected data and enhancing system design to prevent recurrence.



Data Quality Management Approaches



Central Data Division

Strategy & guidance

People

Community of Practice,
data mindset

Leverage Technology

Automate processes by default,
build preventive control

Set direction through Data Strategy & Data Management Policy

Provide standards & guidelines for compliance

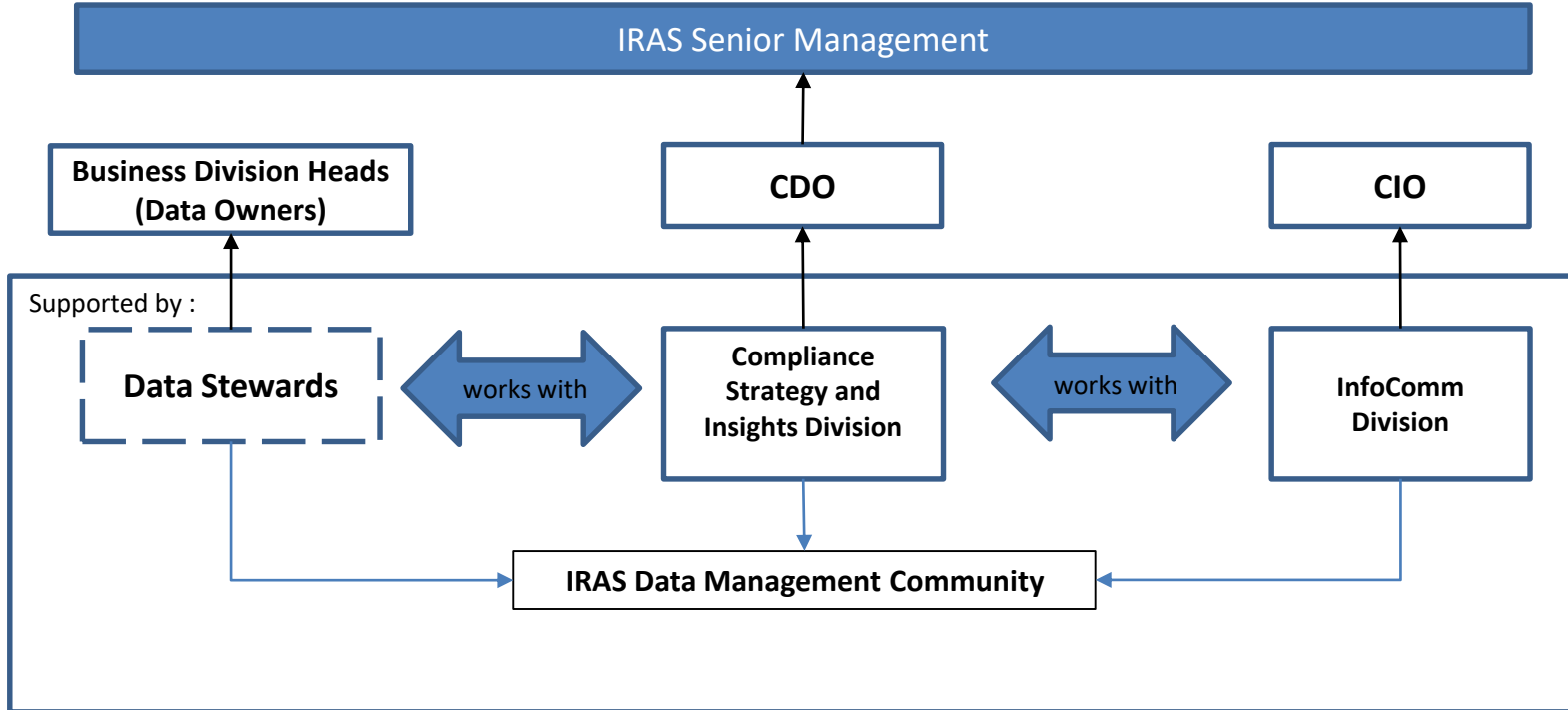
Establish IRAS Data Management Community

Appoint Data Stewards, Data Owners

Collect data digitally eg API and e-Services

Build system validation rules at frontend and backend processes and minimise manual entry

IRAS Data Governance Structure



More can be done ...



Cultivate the "Think Data First" **Mindset**



Provide more **Tools** to support self-discovery and exploration of data



Acquire more **diverse sources of Data**

Conclusion

Our strategy is to **maximise voluntary tax compliance**

- ❖ **A good strategy begins with a good understanding of our taxpayers**
- ❖ **A good outcome rests on the capabilities of our people to deliver it**





Thank You

The information presented in the slides aims to provide a better general understanding of taxpayers' tax obligations and is not intended to comprehensively address all possible tax issues that may arise. This information is correct as at the date of presentation. While every effort has been made to ensure that this information is consistent with existing law and practice, should there be any changes, IRAS reserves the right to vary its position accordingly.