

# 8<sup>th</sup> IMF-Japan High-Level Tax Conference for Asian Countries



## TAX ADMINISTRATION ISSUES USE OF TECHNOLOGY IN TAX ADMINISTRATION



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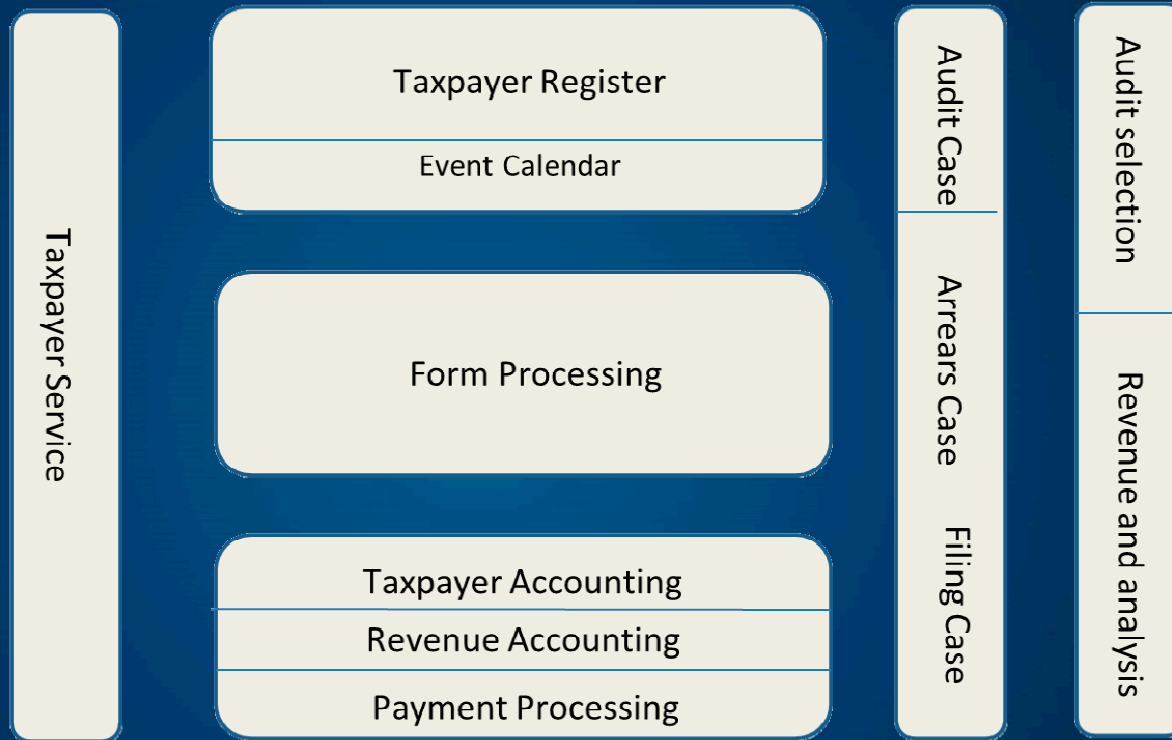
- Why are tax IT systems so expensive?
- What is the life-cycle of a tax system?
- What is the total cost of ownership of a system?
- Is it better to build, buy or integrate?

This session will explore the use of IT systems in tax administrations, current issues facing revenue agencies and factors which may influence decisions on IT strategy.



# Core Functions of a Tax System

Core business functional areas – registration, filing/processing, collections, audit, risk, compliance



Support for functional areas – desktop tools, communication tools, legal, training, IR, workflow, communications, planning etc.



# Why are Core Systems so Expensive?

Tax IT systems used to be glorified calculators – used to provide efficiency

NOT ANY MORE!

- IT systems are now the “heart” of the administration
- They replace or automate increasing amounts and types of work previously done by tax officers (efficiency)
- Increasingly we are using them to improve the way we administer taxes overall (effectiveness)



# What we Ask of our IT Systems

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- Automation of processes and work distribution
- Risk identification and analysis
- Compliance treatment selection
- Audit case selection
- Real-time reporting
- Dependability
- 24 x 7 availability
- Data integrity
- Ability to be accessed by officers, taxpayers, tax professionals
- Ability to operate across end-user platforms and devices
- Ability to interoperate with external systems



# Why are Core Systems so Expensive?

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We're also asking more from them than just tax...

- Social contributions
- Health contributions
- Student loans
- Pension plans
- Etc.



# Why are Core Systems so Expensive?

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Sophistication + Complexity = Cost



# How Long Will a Core System Last?

A well-designed and maintained system typically lasts 10 to 15 years.

- Maintenance is one of the key features of longevity
  - Regular updates to underlying technology
  - Ensuring enhancements are aligned with overall architecture
  - Comprehensive documentation of changes
- Frequent policy change is one of the major “ageing” features
- Lack of attention to data quality also detracts from useful life





# How do you Know when a System is Nearing the End of its Lifecycle?

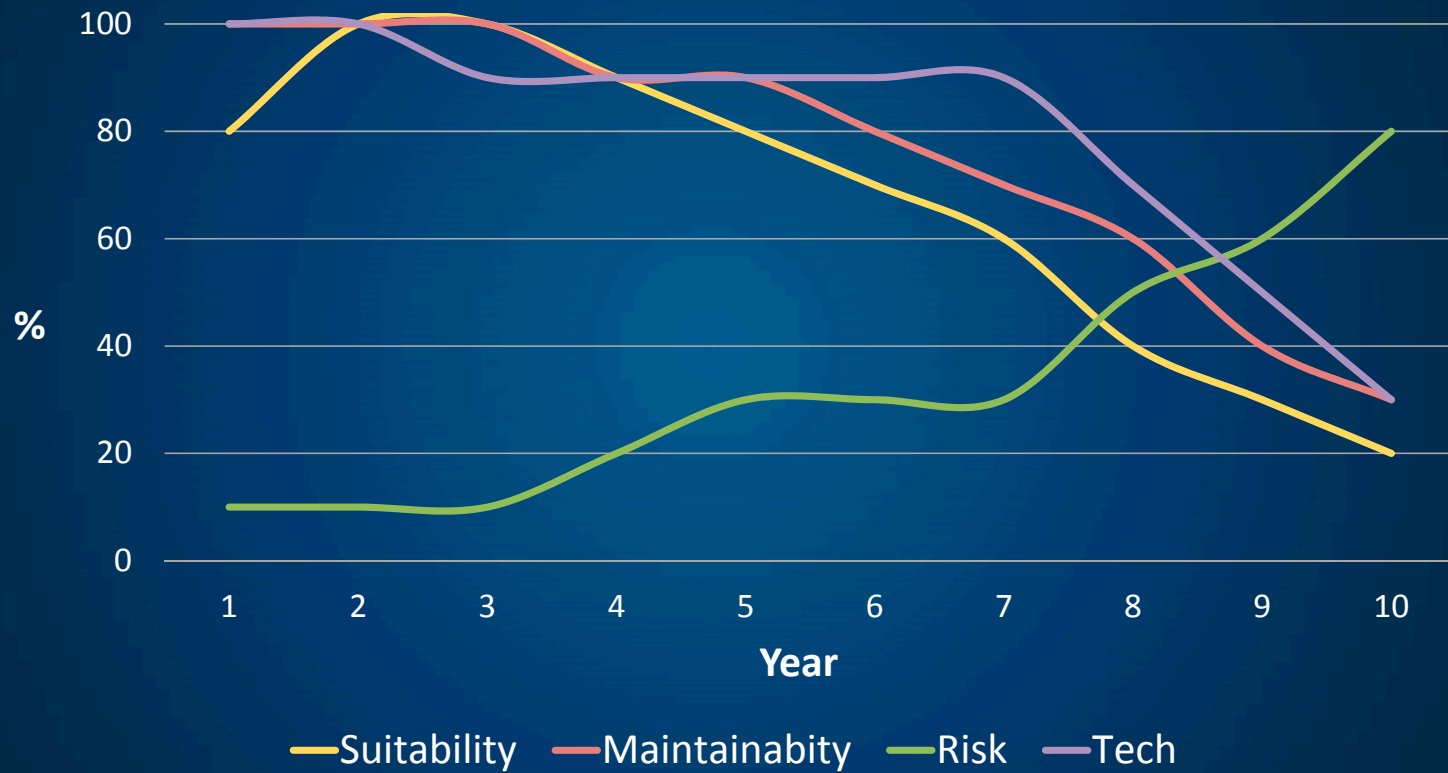
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Four key areas can provide an answer:

- Suitability
- Maintainability
- Risk
- Technical viability



# Lifecycle Indicators



# Total Cost of Ownership

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Paying to build or buy a new systems suite is just the start.

Further costs/capabilities must be provided for:

- Operation costs
- Maintenance (not covered by warranty)
- Licenses
- Additions/changes due to policy changes
- Upgrades due to technology requirements



# Build/Integrate or Buy?

## Further considerations:

- The effort to develop a new system will be beyond normal resourcing levels – “external” assistance will be needed even if a “DIY” approach is taken
- Replacing a major system only happens every 10+ years – it is not “core business” of a tax administration
- Whatever the approach, the business design of the system – how it is to fit in with the overall administration, must come from within the administration



# Build/Integrate or Buy?

COTS Acquisition	Custom Design and Build
More predictable cost.	Estimated cost but high likelihood of over-run
Known tested product.	Unknown outcome from very long and involved design and build process. Heavy testing requirement.
Shorter implementation – less time to market.	Longer process, high likelihood of over-run.
Lower risk profile – product can be demonstrated in operation in other administrations.	Higher risk profile – unproven product.
Known performance parameters and hardware requirements.	Developed during the design/build/test process with associated hidden costs.
Product comes with warranty from vendor.	Administration totally responsible for faults.
Usually requires single procurement process.	Probably requires multiple processes for individual components or services.
Likely to require some business process compromises although should already embody good-practice.	Can be tailored to business process requirements although risk of reintroducing existing poor practices.
Business Process Reengineering (BPR) is usually conducted in parallel with system installation.	BPR is conducted prior to system design in order to establish detailed user requirements.
Vendor supplies all capability to install, configure and support.	Administration responsible for developing, maintaining and retaining staff and skills
Vendor can supply upgrades, (which will be a response to issues experienced by their whole client base) as well as run/maintenance over life of system.	Administration responsible for developing, maintaining and retaining staff and skills.
Documentation readily available and updated.	Documentation preparation and maintenance subject to development team outputs (requires discipline to maintain documentation and change control).
Can be evaluated before purchase.	Can only be evaluated after completion.
Flexibility may be limited by vendor.	Flexibility only limited by technical issues, capability and finance.



# Build/Integrate or Buy?

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Making a decision on a new system is a major event

There are vendors of whole systems, sub-systems and technical products who promise a lot....

- Ensure that actual products are observed in operation in other administrations or equivalent organizations
- Don't believe the marketing until you've seen it work!



# Thank you

thank you

