

Digital Transformation of Revenue Administrations

How can WE in the wider *tax ecosystem* support objectives of lowering costs, enhancing compliance and reducing tax burden – thereby helping to promote growth and investment?

1. Tax Administration 2.0
2. Tax Administration 3.0
3. Introducing the Change
4. Technology Enablers and New Business Approaches

Agenda



- Inventory of Tax Technology Initiatives
- Case: COTS
- Case: Leading by Knowledge - Status Centres
- Case: Voice ID
- Case: Industry Partnership
- Case: Single Touch Payroll
- Case: Estonia

Inventory of Tax Technology Initiatives

- The Inventory of Tax Technology Initiatives contains information on technology tools and digitalisation solutions implemented by tax administrations
- Primary purpose is to assist tax administrations in their reforms and help them identify collaboration possibilities between tax administrations
- The inventory looks at leading technology tools and digitalization solutions and approaches by tax administrations
- The inventory also contains links to case studies
- The inventory contains dedicated webpages for each of the building blocks of Tax Administration 3.0

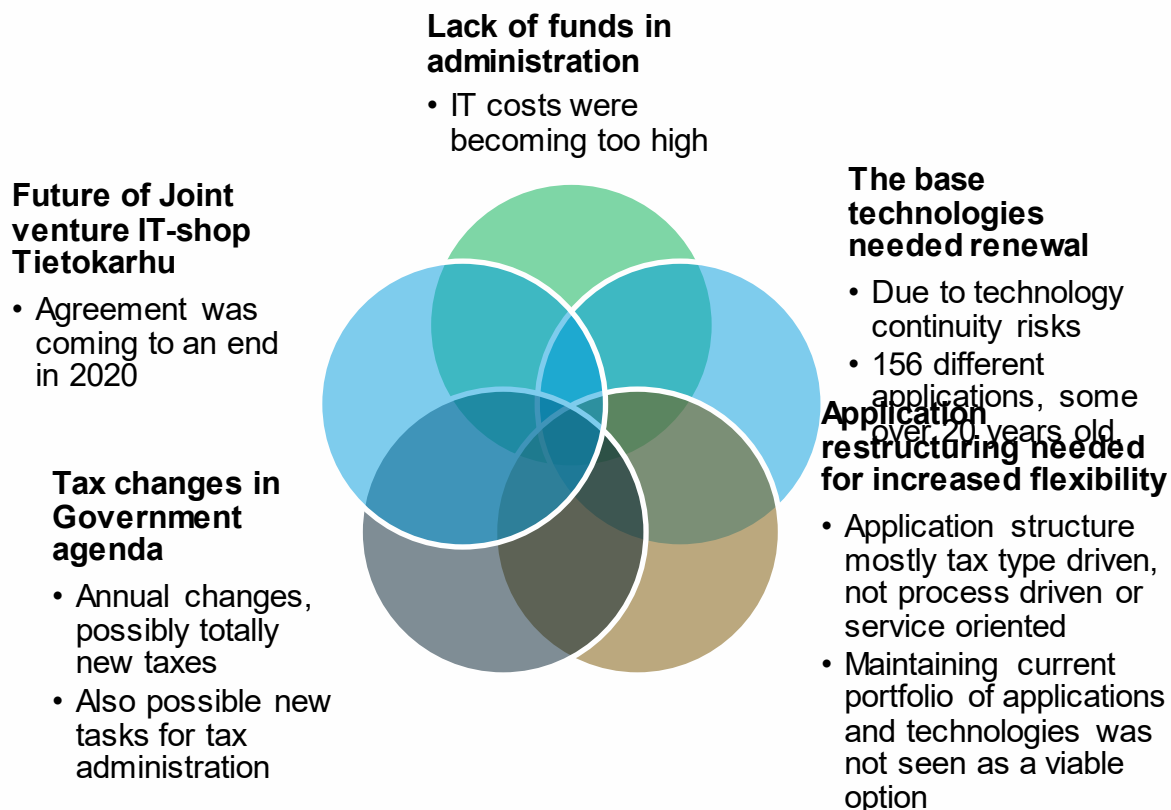
[Inventory of Tax Technology Initiatives - Forum on Tax Administration \(oecd.org\)](https://www.oecd.org/tax/technology/initiatives/)



Case: COTS

Introducing a Commercial Off-The-Shelf
Software Solution - OECD

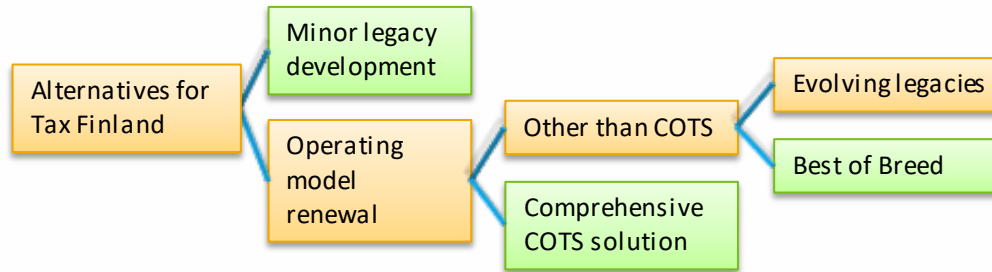
Finnish Tax Administration's Situation Back in 2010



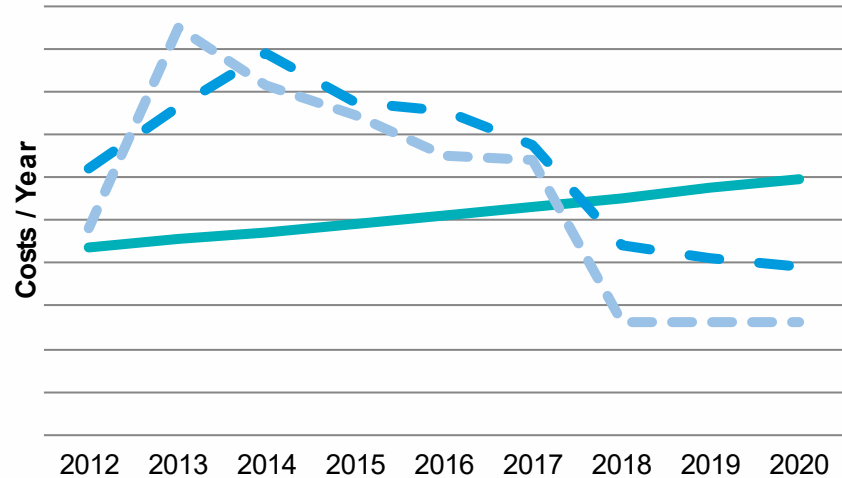
How Finnish Tax Administration Proceeded



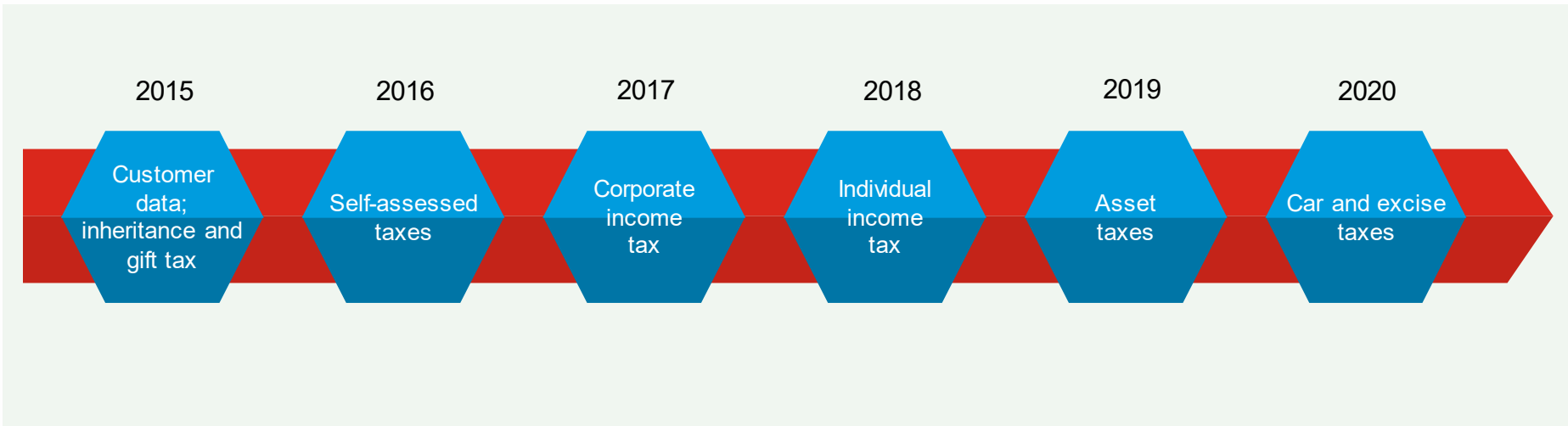
Finnish Tax Administration's Alternatives and Considerations



- Minor legacy development**
 - Continuing existing model
 - No relevant changes
 - No improvement for cost effectiveness
- Best of Breed**
 - Combined from separate components, which might be hard to integrate
 - Takes longer than COTS
- Comprehensive COTS solution**
 - Internal integration ready
 - Can be purchased as one entity
 - Quickest way to achieve the results



Phasing



Program Numbers



	Rollout 1	Rollout 2	Rollout 3	Rollout 4
Test Scenarios passed	14 000	43 800	32 000	74 000
Customers converted	7 615 120	NA	NA	NA
Payment Transactions converted	889 440	141 161 839	7 009 458	97 426 379
Users trained	5000	4250	4000	3600

Main Benefits of Custom Built Systems

Highly customisable

Can accommodate any requirements

Well-suited for fragmented environment

If there is limited need for linkages between functionalities, separate systems work well

Lower initial costs

No licence fees.

High in-house ICT development capacity building

Everything stays in the control of the administration. Ownership of the source code

Main Business Benefits of an Integrated COTS System

Integrations between functionalities

Data can be utilized in all the processes and functions

Uniformity of processes and process chains

Transparency of process linkages and co-dependencies. Available good practice processes

Overview of the customer

All the data is in the same system, and it can be utilized for audits and customer service.

Integrated services for customers

All the tax information in the same system. Customer and officer have the same view of the situation

Analyzing the behavior of the customers

Better understanding of customers and their actions

Main IT and Project Benefits of an Integrated COTS System

Lower risks

Product can be demonstrated in operation. Iterative configuration of the product.

Tried and tested implementation methods

Knowledge of implementation projects and their requirements.
Shorter implementation

Software continuously develops as the environment changes

The technology of the product keeps developing.

Benefitting from the work of other administrations

Tested and functional product.
Known performance capabilities and hardware requirements.

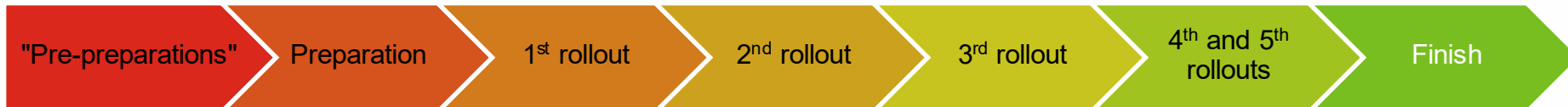
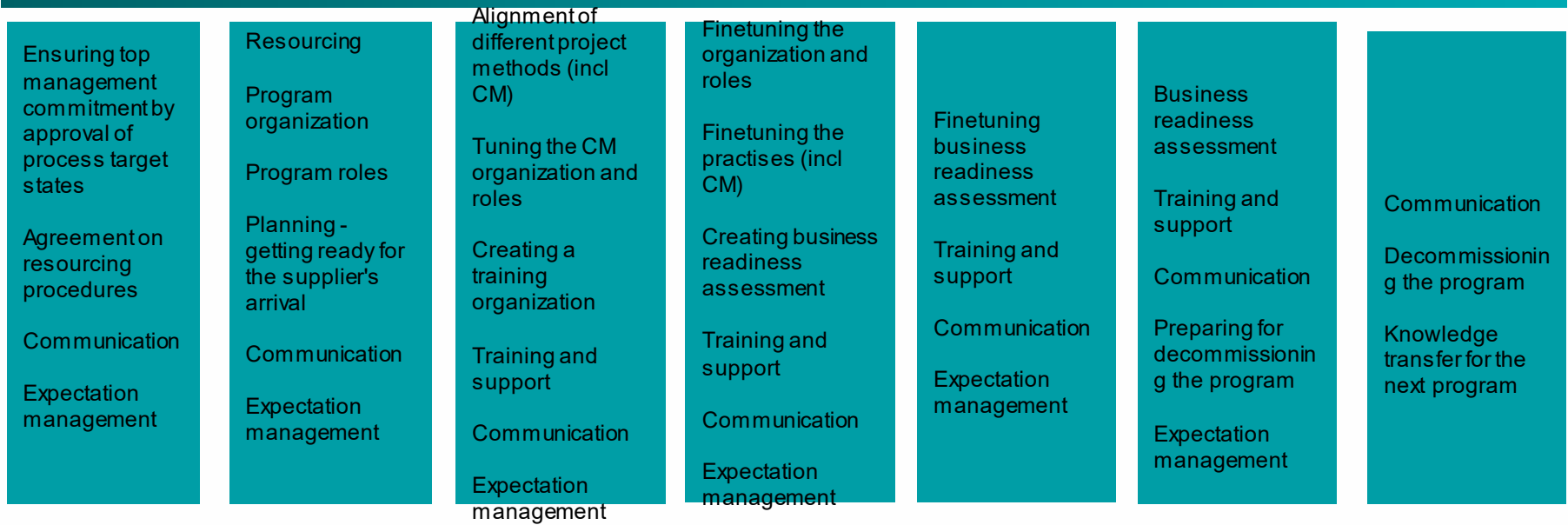
Lower need for internal capacity for software development

Vendor takes main responsibility for implementation and for maintenance if needed.

Dexterity and cost benefits

Predictable costs. Changes and corrections are quicker and cheaper to make

Change management activities are needed in all phases of a COTS project



**Focus on the outcome:
what is needed and why**



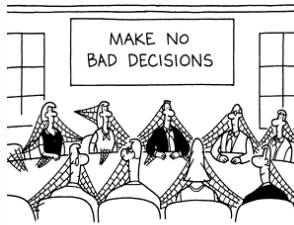
Maintenance



Usability



**Quick decisions,
compromises and
delegation**



Goff

Standardize



**Working
Together**

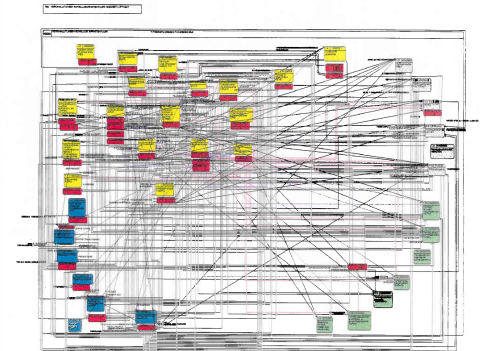


Some Lessons Learned

Prioritize



Simplify



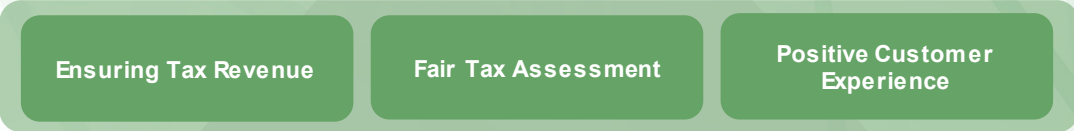


Case: Leading by Knowledge - Status Centres

[Finland](#) (*Staying Ahead in an Environment of Constant Change*)

Best taxation – together

We collect the right tax at the right time in order to fund public services



CAPABILITIES

- Building Trust
- Working Together
- Embracing New Ways of Working

Principals of the New Operating Model of Renewal and Self-Directedness

SHARED OBJECTIVES AND METRICS

- Team objectives are derived from the strategy - everyone knows what the objectives and measures mean in their work. Teams decide how they strive to reach the goals.

JOINT ACTION TO REACH THE GOALS

- Teams operate according to the jointly agreed rules and plans. Everyone takes responsibility of the joint objectives. Teams can plan and develop their own work to reach their goals.

KNOWLEDGE ON ACTION AND RESULTS

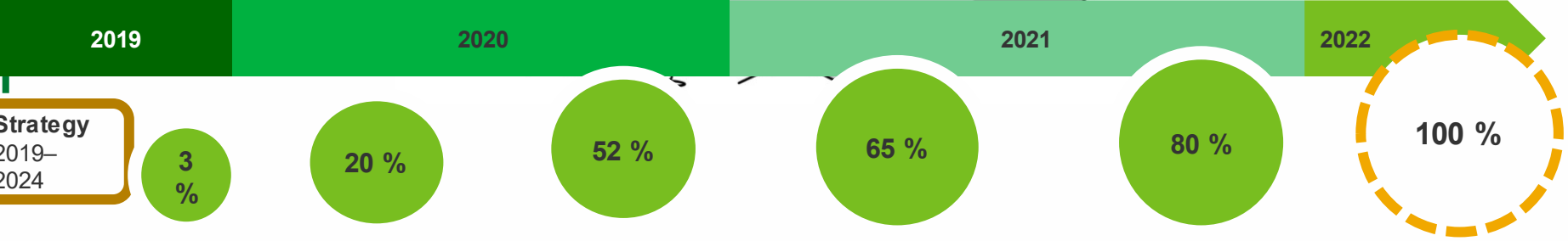
- Teams have digital "status centres" to provide information on how they are doing (results, employee satisfaction, work culture). All information is transparent which enables ongoing development in the teams.

ONGOING EVALUATION, PROBLEM SOLVING TOGETHER AND ASSESSING THE RESULTS

- Teams meet weekly in "status centre" meetings to discuss on how things are going, identify barriers of development and give and receive feedback on the work done.



Self-Directedness for Increased Agility and Effectiveness



Team Development: Assessing Team Maturity

1. Cooperation
2. Goal-orientation
3. Trust
4. Individuality
5. Renewal
6. Operation according to the model



Status Centres: Transparent Information

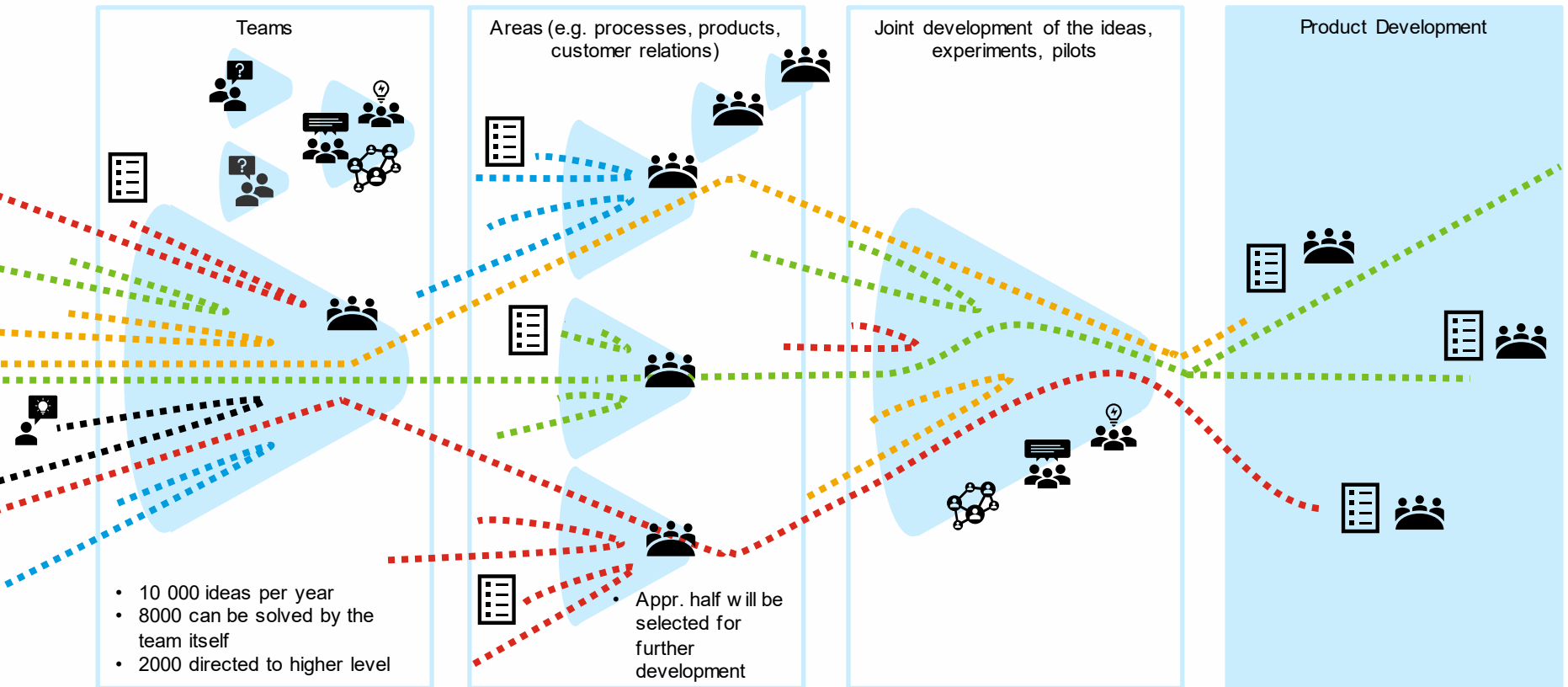
Common goals and results in one place (status centre)

Real-time and unified operational snapshot from top management to individual clerk

Transparency of data: the results of the various actors can be seen openly



Flow of Ideas



Case: New Zealand Inland Revenue Voice ID - What is Voice Biometrics?

- A voice biometric is the unique representation of the characteristics that make up an individual's voice (pitch, tone and rhythm)
- As an authentication tool it can't be taken away, lost or counterfeited or forgotten
- Voice print is enrolled and customers' voice is matched against this pre-recorded voice print
- It allows Inland Revenue to identify and verify callers with certainty and therefore do far more for them

Voice ID - Drivers for Voice ID

- **Self Service**

- Remove authentication barrier to allow greater access
- Encourage self service migration through voice self service to increase uptake in the internet
- Bring together voice and internet channels to allow more services to be channel independent

- **Security**

- Fraud deterrence and detection improvement
- Higher level of security of customers information

- **Customers**

- Enhanced customer experience as simpler, faster and more consistent verification process

- **Cross government collaboration**

- Increase potential for inter-agency collaboration

- **Financial**

- Cost effective

Voice ID – Unsustainable phone traffic

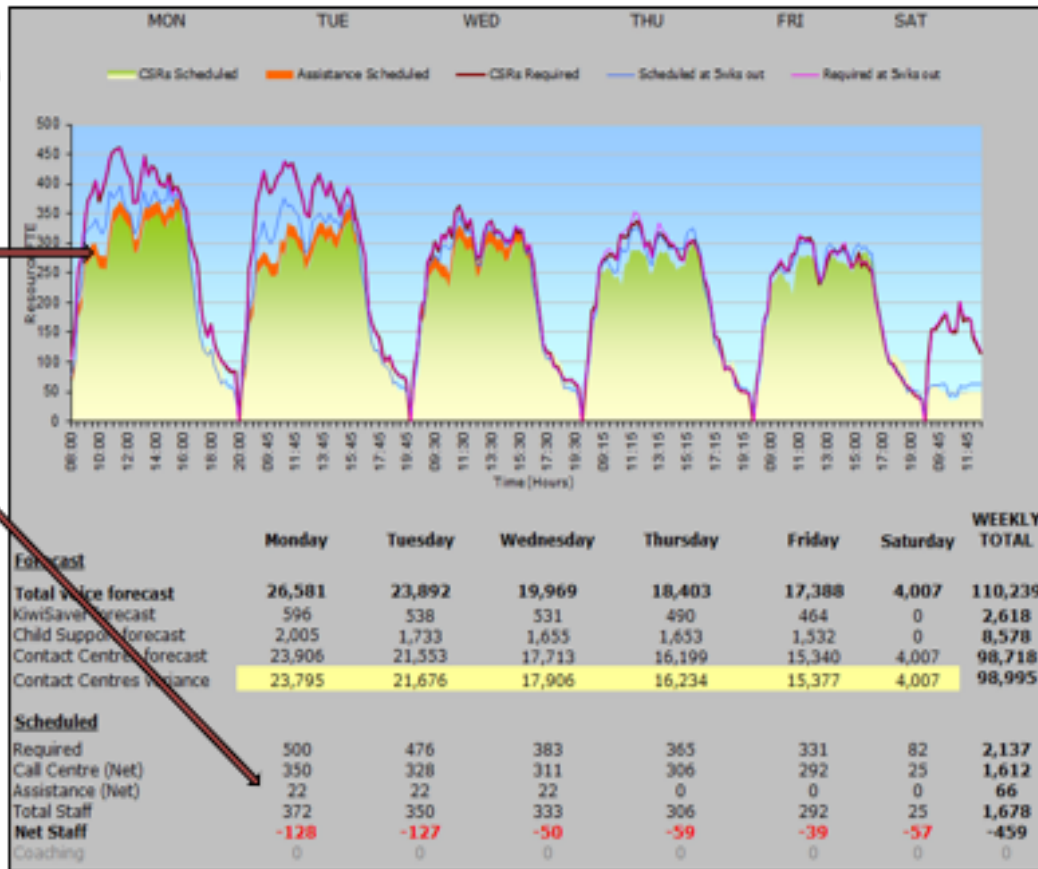
I am...
My IRD number is...

A compressed
view of a
significant issue
Exacerbated over
time

I want to change
my bank account
details

How do
I activate my online
account?

How do I reset my
password?



“Inland Revenue needed to address the growing and unsustainable phone traffic to its contact centres, particularly low complexity calls that are time consuming for contact centre staff”.

What's my IRD
number?

Voice ID - Pre Voice ID State

- Validation based on wallet-based information – date of birth, address, PIN for phone self service and password for on-line
- IVR System (SPK2IR) could only partially verify a caller
- Process placed onus on Customer Support Specialist to spot attempted identity fraud by requirement to ask a third token
- Started every customer conversation with a challenge
- Access to simple automated transactions only

90 Second Enrolment Process

RING ...

0800 257 843


AND FOLLOW THE PROMPTS.
YOU'LL BE ASKED 3X TIMES FOR ...

YOUR IRD NUMBER ...

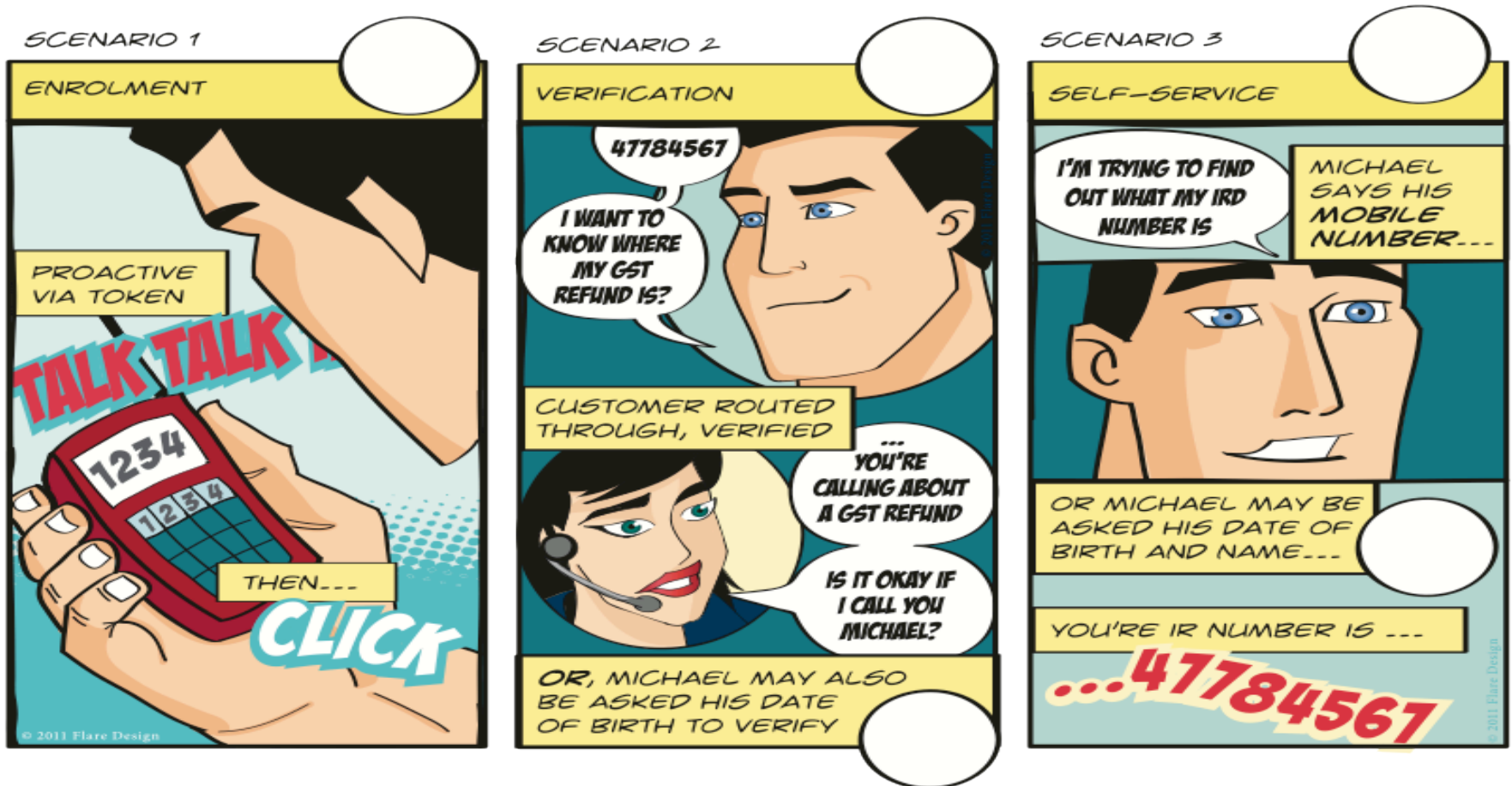
DATE OF BIRTH ...

AND MOBILE NUMBER

IF YOU DON'T HAVE A MOBILE PHONE, JUST
HANG-UP AT THAT STAGE OF THE CALL.
THE REST OF YOUR DETAILS WON'T BE LOST.

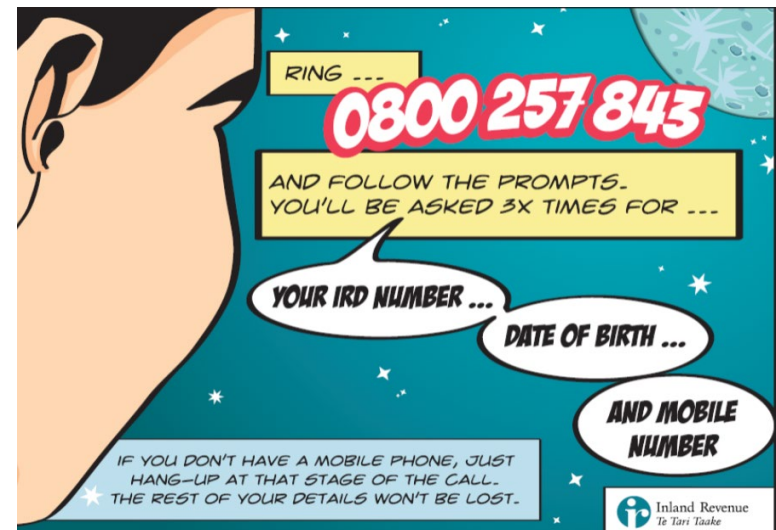
 Inland Revenue
Te Tari Taake

Verification Processes



Three Enrolment Channels Available

- **SPK2IR** - Reactive automated offer through the SPK2IR speech recognition system when customers have called
- **CSS** - Contact centre staff inviting customers to enrol
- **Direct** - Direct enrolments through response to 0800 phone enrolment line awareness



Enrolment Initiatives

- Verification thresholds in the biometrics engine have been reduced to industry levels as we now have confidence in the system
- Customers registering for Online Services are asked to enrol their voice print and vice versa
- Customers over 16 who get a new IRD number enrol their voice as part of sign-up process
- Voice ID to replace PINS for self-service authentication where possible
- All PTS customers calling are to be actively enrolled this year

Customer Benefits



Inland Revenue
Te Tari Taake

New Zealand Government

Enrol now. It's Fast, Simple, Secure.

The advertisement features a smiling woman with long brown hair talking on a white mobile phone. In the top left corner is the Inland Revenue logo, which consists of a stylized 'i' and 'r' inside a circle, followed by the text 'Inland Revenue' and 'Te Tari Taake'. In the top right corner is the text 'New Zealand Government'. A large teal speech bubble on the right side contains a white padlock icon with a keyhole, symbolizing security. At the bottom, a dark teal banner contains the text 'Enrol now. It's Fast, Simple, Secure.' in white.

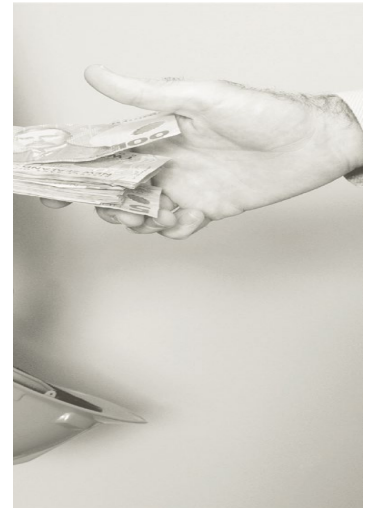
Inland Revenue Benefits

- Returning 117% of planned benefits for the first year
- Over 55% of daily calls facilitated by Voice ID
- Saving twice as much in call handling time as projected
- AHT savings equals 42 seconds per call
- Expanding access to self-service options, including:
 - activating myIR accounts
 - reset myIR password
 - reading back a customer's own Inland Revenue number
 - changing a customer's bank account details
- Improved protection of customer information
- Improved customer experience and agent morale

Case: New Zealand Inland Revenue

What is Industry Partnership?

- A program aimed at reducing the incidence of undeclared income from cash transactions in selected industries, including people and organizations operating partly or completely outside the tax system (the hidden economy).
- Expanded to include insights that helped improve tax compliance through understanding what influences different groups of people.
- The program involved NZIR developing relationships with selected industry organizations to:
 - increase the voluntary tax compliance levels within selected industries
 - increase IRD's presence in the community
 - improve the community's perception of IRD
 - target audit resources at the highest risk cases within selected industries.



Selecting Industries

- The industries covered were selected using criteria based on information in NZIR's system:
 - average number and value of tax returns outstanding
 - average number and value of tax debt outstanding
 - likelihood of a taxpayer having tax discrepancies.
- The criteria were calculated for each industry class. Medium-sized industries were selected from this list, and a subset of 15 industries was chosen for industry partnerships. Medium-sized industries were defined as having between 2500 and 10,000 tax entities recorded in IRD's information system.
- Industries had to have a national representative body
- Concerns about unfair competition and safety issues also influenced the selection of industries



What is Industries were partnered?

- Electrical services
- Painting and decorating services
- Services to agriculture
- Entrepreneurial services
- Hairdressing and beauty salons
- Smash repairing
- Automotive repair and services
- Long-distance bus transport
- Plumbing services
- Taxi services
- Gardening services
- Landscaping services



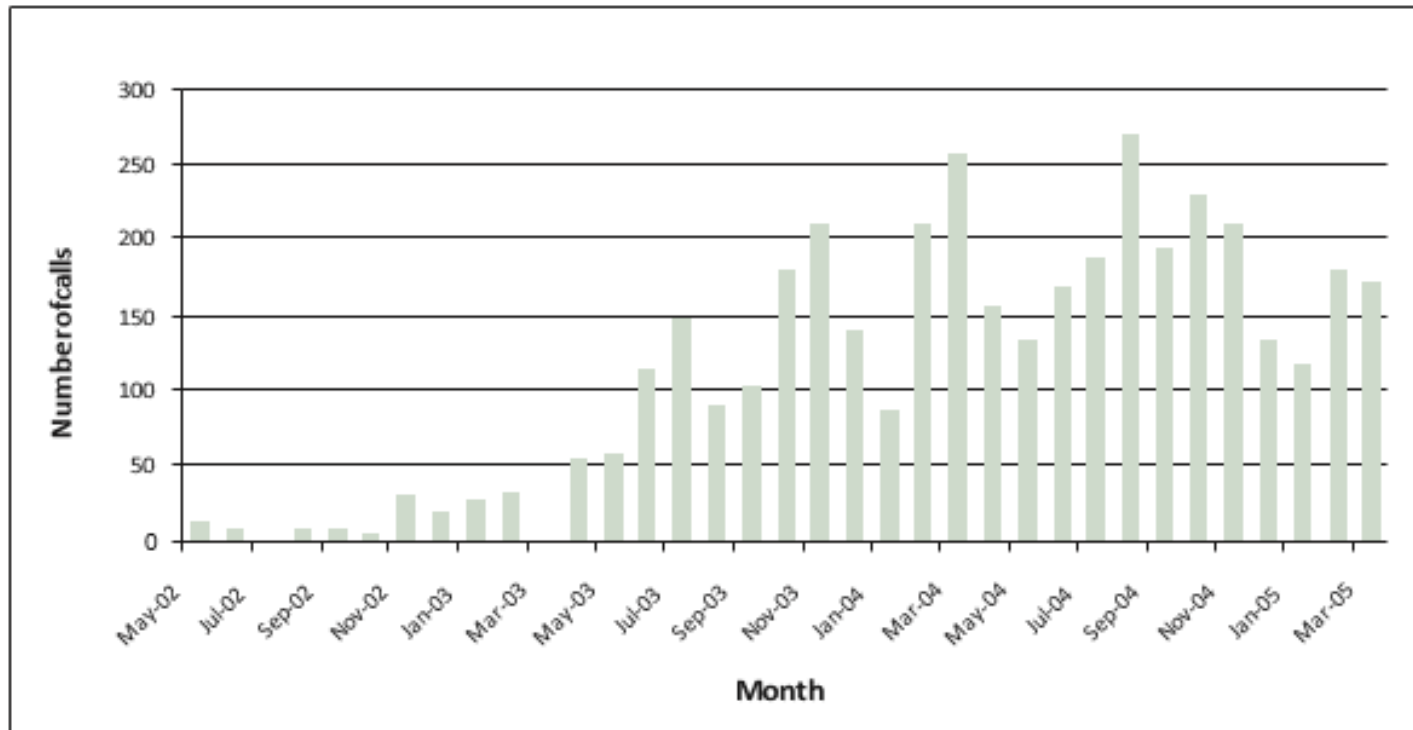
Industry partnership process

- Headquarters team that designed and lead the program. HQ staff included analysts, designers, researchers, evaluators and relationship managers
- Structured field teams to engage and address local issues – these teams comprised encouragement and assurance teams (service & enforcement)
- Work was governed and reported directly to the Commissioner DTD
- The program grounded on the compliance model and aligned to strategic direction of NZIR
- Design was deliberately unconstrained
- NZIR through risk-based analysis identified industries that were significantly under-performing
- Industry engagement agreed areas of focus
- NZIR used design and communications approaches to enhance industry members understanding of tax obligations, This included material tailored for specific industry, rulings and guidance on common concerns and specific assistance for members with overdue debt, returns, or other obligations. These were supported by dedicated phone lines



Industry partnership process

Call volumes to the 0800 number for industry partners, 2002 to 2005



Source: Inland Revenue Department.

Results of the program

Across all industries in a three period of operation NZIR reported:

- the value of outstanding tax debt decreased by 5%
- the number of debt cases decreased by 24%
- the number of outstanding returns decreased by 19%
- Audit adjustments fell below non-industry partnership groups and NZIR standards
- Prosecutions remained at targeted levels, but media coverage improved, and higher penalties were imposed.
- One industry example for one year showed

Electricians, and painters and decorators	
Debt cases	19.4% decrease
Average age of debt	8.3% decrease
Debt under arrangement	195% increase
Outstanding returns	7.7% decrease
Average age of outstanding returns	10% decrease

Industry perceptions were *very positive*, with the evaluation of the program recording the approach had altered the business community's view of NZIR and generated higher levels of trust and confidence

Case: Australian Tax Office Single Touch Payroll

About this initiative

- Australia launched Single Touch Payroll (STP), an API enabled digital channel in July 2018 to improve the way payroll data is reported to the Australian Taxation Office (ATO).
- STP introduced the real time reporting of payroll information by employers to the ATO. It leverages existing payroll cycles and business software systems to enable the reporting of salary, taxation and superannuation data to the ATO, each time employees are paid.
- The ATO collaborated with partners in the natural systems of taxpayers and businesses on the concept, design and delivery of STP.
- As STP continues to be enhanced, opportunities are being realised across government to utilise the information already provided by employers through their STP reporting.
- This reduces regulatory burden and delivers better government service.

Australian Tax Office Single Touch Payroll

Describing the shift

FROM:

Forms and paper environment

- Forms driven (if lodged)
- Periodic, aggregated, historical data
- Prone to errors
- Manual, slow & costly
- Limited transparency & certainty
- Retrospective (partial) risk detection & treatment





TO:

A digital ecosystem





- Data driven in natural systems
- Event based, detailed & current data
- Enables validation of data
- Enables automation
- Fully transparent (where appropriate)
- Ecosystem encourages real time compliance

Australian Tax Office Single Touch Payroll

Adoption by end 2020:

-  **780k employers** reporting in real time through STP
-  **13.5m employees** with real time access to their tax & super position
-  **47m STP reports** lodged
-  **713m employee records** received

By the end of 2020

-  Easier for businesses to meet their tax & superannuation obligations
-  Streamlined processes for employees starting new jobs & increased transparency of tax & super position
-  Reuse of STP data to prefill a range of individual & business obligations
-  Utilising STP data to assist in the delivery of COVID-19 stimulus measures such as JobKeeper - the largest economic stimulus measure in Australian history.

STP: Better for employers, better for staff, better for business.

ESTONIA - SERVICES AND SOLUTIONS

Service domain

- Tax returns and special cases
- Payment solutions
- Payment of arrears in installment
- Electronic certificates
- Notifications
- Management of authorizations

Transparency domain

- Publishing of aggregate payment and debt data
- Access to own 3-rd party data
- Feedback ratings

Control domain

- Register of employment
- VAT listings
- Excise goods solutions
- Automatic debt enforcement

Important background

- Everyone in Estonia has a unique ID code
- Everyone has a chipped ID card – for authentication and digital signatures (other methods available and used)
- No super database – all institutions handle their own data and must exchange through a secure data exchange layer – X-tee
- OOP

TAX RETURNS

E-submission available for 20+ years: fill out online, upload xml, direct from accounting software

All recipients and payment types are **codified** – the system calculates all

Logical control and error / warning messages displayed allowing for return **correction by taxpayers themselves**

PIT returns pre-filled since 2004 with all domestic incomes and deductions (**3rd party reporting obligations in place**) – few minutes to submit and the refund takes place usually within 2-3 days

Cooperation for simplification

Legal persons, customers of cooperating banks, can pay salaries to employees (plus dividends) by entering only the net amount and the employee ID code. Taxes are debited and reported by the bank **automatically**.

Sole proprietors with no deductions can open a special bank account for business. All receipts will be taxed **automatically** at 20% (gross) and reported to the tax board. No other obligations apply.

TAX PAYMENTS

Electronic payments

- Payments are recorded either **instantaneously** (initiated via banklink from e-tax services, like online shopping) or within **10-15 minutes** (regular bank payment)
- No domestic payment is accepted without a **reference number**
- All payments are made into a taxpayer's **pre-payment** account with the TCB, same with refunds
- Due taxes are debited from there on a due date based on the **chronological** line-up of tax obligations or, if same day, on the **order stipulated by the law**; virtually, no choice.

Paying arrears in installments

- **Automatic installment schedules** are available in the e-service
 - Up to €50,000
 - Up to 12 months
- The taxpayer does not have to come to the office or call / write to TCB staff
- A number of **criteria** apply, e.g.,
 - All tax returns are in
 - No unpaid fines or administrative duties
 - No ongoing disputes
 - No cancelled installment schedules within the last 6 months
- Installments can also be **applied for in advance**, if debts are anticipated

OTHER SERVICES

Electronic certificates

- Taxpayers can **generate** electronic certificates from TCB registers **themselves**
- These will be signed with the TCB digital signature (**time-stamped**)
- The certificates (rather the time-stamped envelope) **cannot be altered**
- Mostly used for private purposes (banks, partners), because **state institutions have own access** if tax data is required by the law (police, social security, labor inspection, etc.)

Notices

- **Automatic notices** are sent to taxpayers by email and SMS
 - Upcoming deadlines
 - New communication from the TCB in e-services
 - Debts and missed return submission dates
- There are **logs of notices** from e-services being **opened** on the screen of the taxpayer – cannot use the ‘I did not get anything’ reasoning
- Management of **authorizations**
 - Board members according to the Commercial Register data can grant and revoke access different rights to accountants and tax specialist – no need to apply or visit the office

REGISTER OF EMPLOYMENT

Half-service

- **One-off** registration of employees (incl. volunteers, helping family members, etc.)
- **Data forwarded** to other applicable registers – Social Security Board, Health Insurance Office, Labor Inspection, etc.
- Queries of place of employment mean **no need to submit certificates** – Police, local governments, Military
- Online **registration prior** to allowing to fulfill work duties
- SMS registration possible in case of **network disruptions**

Half-control

- No **'first-day' employees** with paper job contracts in the drawer due to preceding registration obligation
- Registered employees for whom salary payments and taxes are not reported are a **risk criterion** for employers

Results

- 'New' employees +2% of the total country workforce within the first 3 months
- Approx. 85K new employer-employee pairs within the first 6 months (mostly previously unofficial side jobs)
 - Total workforce approx. 650K

VAT INF – INVOICE LISTINGS

Obligation on VAT-liable persons to submit **monthly invoice listings** of sales and purchases (separately) with all B2B partners with turnover of €1000+ EUR

- Invoice date, number, amount, partner
- No substance of dealings

Compliance by design

- **Difficult to underreport** sales – purchasers will report inputs
- **Difficult to inflate** inputs – no seller info

Benefits: matching and networks

Results

- Tremendous **deterrent** impact – gap decrease from 14% to 5% between 2014 and 2017
- Average **duration** of VAT audit down from 100 days to 20 days (2014-2020)
- **Number of audits down** from 4000 to 3000 annually and consultations up from 500 to 8000 by 250 auditors, which is - 110 (same period)
- New **analysis opportunities**: mismatches, partner risks, stability of partners, networks

EXCISE GOODS – FUEL EXAMPLE

Fuels are **heavily taxed** in EU with excise taxes on top of VAT

With electronic movement control systems for duty suspension, some of the **fraud shifted to VAT**

With internal carousel fraud and missing traders, a saving equal to the VAT rate is 'earned'

New system

- Fuel traders must be **registered and present guarantee** equal to the VAT amount on fuels in possession
- In case of sales, the seller's guarantee is freed and the buyer's guarantee is booked
- If the buyer has no guarantee or it is maxxed up, the seller's **guarantee is not released** and he remains liable for VAT payment
- Only **electronic bills of lading** in the TCB system are accepted (prior to movement) – no possibility to conceal the fact of transportation afterwards

DEBT ENFORCEMENT

Enforceability of tax debt decreases with time and swift reaction is key

- ❖ **Automated message** is sent by email / sms 1-2 days after the deadline
- ❖ On day 10, an **official warning letter** / administrative act is sent
- ❖ With no payment or installment schedule, an **automatic seizure order** is sent to banks if and where the taxpayer has an account (a **joint system of banks and bailiffs** for automating fulfillment of seizure orders)
- ❖ With no bank accounts, the debt is transferred to bailiffs for enforcement
- ❖ The principle of the automatic system is that there is no room for evaluation, unless it is deciding on installment schedules – a debt is a debt, objectively

TRANSPARENCY

All tax **debts are public** information at all times

- ❖ Realtime **query** 24/7 by ID or registry code on the webpage
- ❖ A regularly updated listing of all debts of legal persons (amount, incl. objected, age of debt) – open data, available electronically

Quarterly **summary data on paid taxes** for each legal person is available on the webpage

- Data on VAT status, registered industry type, location, sum of all paid state taxes, sum of all paid labor taxes, total turnover, number of registered employees

Rationale: most businesses know their competitors and it is difficult to cheat on taxes to a significant extent for a long time with your **competitors keeping an eye on you**

RATINGS FEEDBACK

The TCB has lots of data on taxpayers and it cannot reach everyone either to inform or to check

The TCB uses aggregate ratings which indicate **what the TCB thinks** of the taxpayer's compliance levels

These ratings are shown to legal persons themselves in their e-services

There are explanations for each evaluated indicator and **guidance for actions**

Ratings can be **downloaded and shared** with partners

The TCB shows two ratings with relevant explanations

- Rating based on **objective** facts
 - Tax returns submission
 - Tax arrears
 - Recorded offences
 - Tax proceedings
 - Background of responsible persons
 - Average wages
- Rating concerns based on **evaluations**
 - Reported employment and sales data doubts
 - Potentially unreported taxable expenses
 - Potentially problematic discrepancies in reported input VAT and other observations

RATINGS FEEDBACK



Tax compliance rating
March 2021

2 /3

There are some deficiencies in your tax behaviour. In order to improve your rating, remedy the deficiencies and be more careful with your tax matters in the future.



Tax behaviour adequacy rating
March 2021

1 /3

There are significant deficiencies in your tax records. In order to improve your rating, remedy the deficiencies and avoid repeating the same mistakes again.