

E-Government Interoperability Framework An Australian Perspective

SEMIC.EU
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Presenter – Three Hats

1. Chair - UN/CEFACT Architecture Working Group
2. Government – Australian Government Information Management Office (AGIMO)
3. Director – Red Wahoo Pty Ltd.

Agenda – Three Parts

1. Australian Interoperability Projects & Challenges
2. Australian Solutions and Examples
3. Relevance to SEMIC

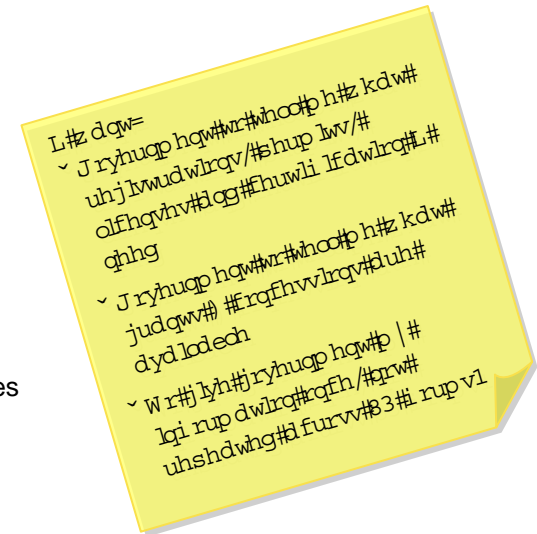
TYPICAL e-Gov SCENARIO : STARTING A BUSINESS

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Introducing Dave...

- Wants to open a specialist manufacturing business in the Sydney suburb of Brookvale.
 - Is obliged to understand and navigate local, state, and federal regulations and complete dozens of registration, licensing, and permit processes.
 - Plans to hire about a dozen staff and service customers across Australia
- ABN Registration
 - ACN Registration
 - Name Registration x 8
 - Trademark registration
 - Development approval
 - A dozen State licenses
 - Workplace safety certificates
 - Import/ Export licenses
 - Grants & concessions
 - Etc, etc



Australian government projects like “Business Names” (ABN-BN) and “Standard Business Reporting” (SBR) aim to give Dave what he wants.

Many other governments around the world have similar initiatives to deliver “outcomes based e-government services”.

SEMIC has more of a cross-border / cross jurisdictional context. But there are also relevant examples for that from Australia due to the federal system.

SOME CURRENT AUSTRALIAN e-GOVERNMENT PROJECTS

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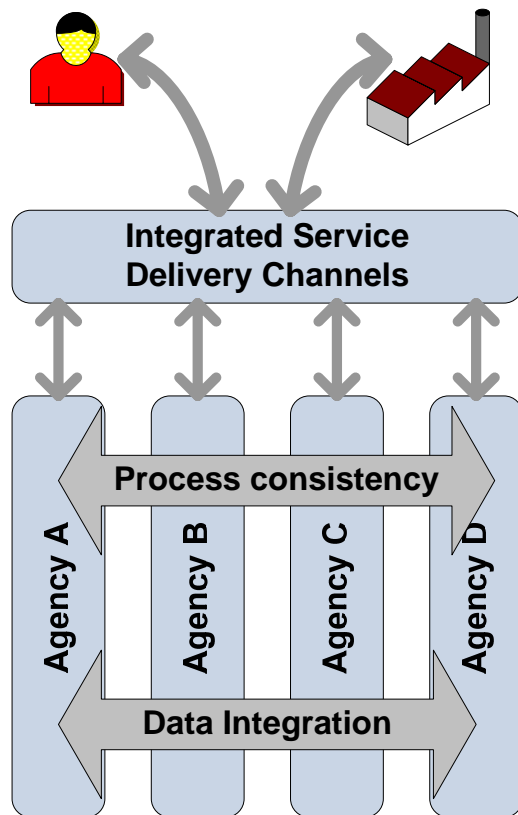
Project	Agencies	Goals	Scope	Budget
SBR	ATO, ASIC, APRA, ABS, 8xSRO	To reduce the regulatory financial reporting burden on Australian business	Phase 1 (2010) – 80 forms, 1 million businesses.	\$200M +
Wickenby	ATO, Foreign tax authorities	To detect tax evasion	All financial institutions and all transactions within and across borders.	\$200M *
ABN-BN	ATO, DIISR, ASIC, IPAus, 8 x States	A single registration process for business. (the “Dave” story)	2 million Australian businesses.	\$100M +
AGOSP	AGIMO, DHS, DIAC, etc	A single service entry point and sign-on for Australian citizens	20 million citizens.	\$100M +
Crimtrac	AG, AFP, 8 x State Police	A central repository for “persons of interest” to facilitate cross-jurisdiction policing.	All persons with a criminal record or other history of police interaction.	\$200M+
eDA	8 states, 600 local governments	A single integrated building and land development application process	40 processes, complex multi-party collaborations.	\$60M +
PPSR	AG, 8 states	A single personal property security register	All financial institutions & major car / property dealers	\$100M +

And this is just a small sample – the ones I have worked with..

Blue = cross jurisdictional context

KEY CHALLENGE - WORKING ACROSS THE SILOS OF GOVERNMENT

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Integrated service delivery requires:

- Integration across the silos of government.
- Consistency in many-to-many scenarios.
- Co-operation and collaboration
- Standards and strong governance

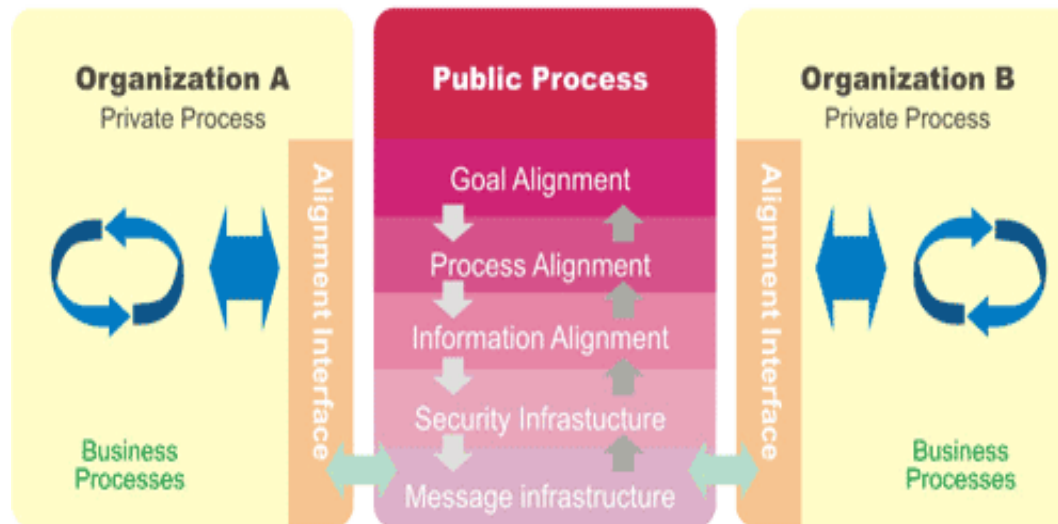
This is hard because agencies are used to working independently and must legally maintain independence (FMAA). States are jurisdictionally independent and rarely cooperate.

Cross jurisdictional interoperability within a country presents similar problems to cross-border interoperability between EC countries.

KEY CHALLENGE – STANDARDS & REACHING A COMMON UNDERSTANDING.

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Define common standards and let agencies continue business as usual but map to standards



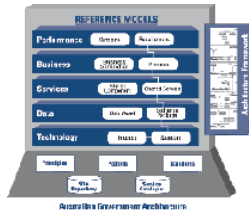
Interoperability requires alignment at several levels. Standards apply at every level.

- **Messaging** – getting the information from A to B. Needs protocols and profiles.
- **Security** – ensuring that A can trust B. Needs identity management, tokens, profiles.
- **Information** – A and B must speak the same language. Needs common libraries.
- **Process** – A and B understand the context and expected outcome. Needs a methodology.
- **Goal** – A and B must both satisfy a selfish commercial interest. Needs a business incentive.

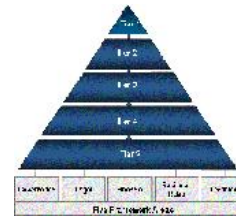
SOLUTION COMPONENTS: AN OVERVIEW.

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Policies & Frameworks



Australian Government Architecture (AGA) – based on US FEAF.

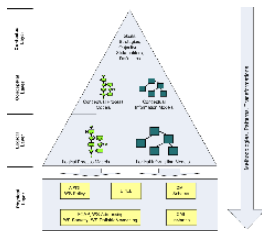


National Service Improvement Framework (NSIF) – legal templates

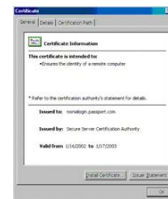


National Government Interoperability Framework (NGIF)

Tools & Methods



Government Information Exchange Methodology (GIEM) – based on CEFACT



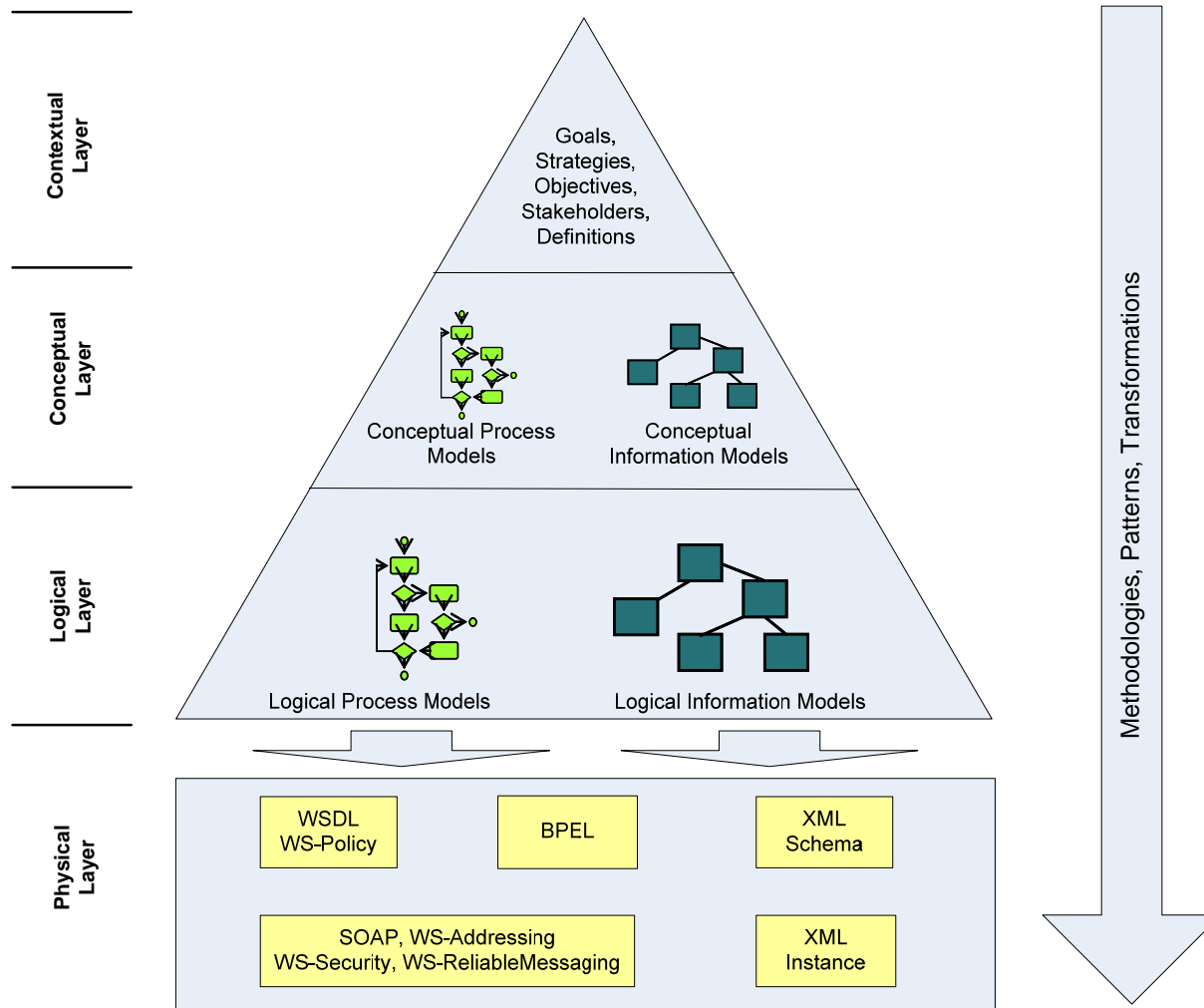
Australian Government Authentication Framework (AGAF) and “Gatekeeper”



“GovDex” collaborative workspace, model repository, services registry

SOLUTION COMPONENT: METHODOLOGY – “GIEM”

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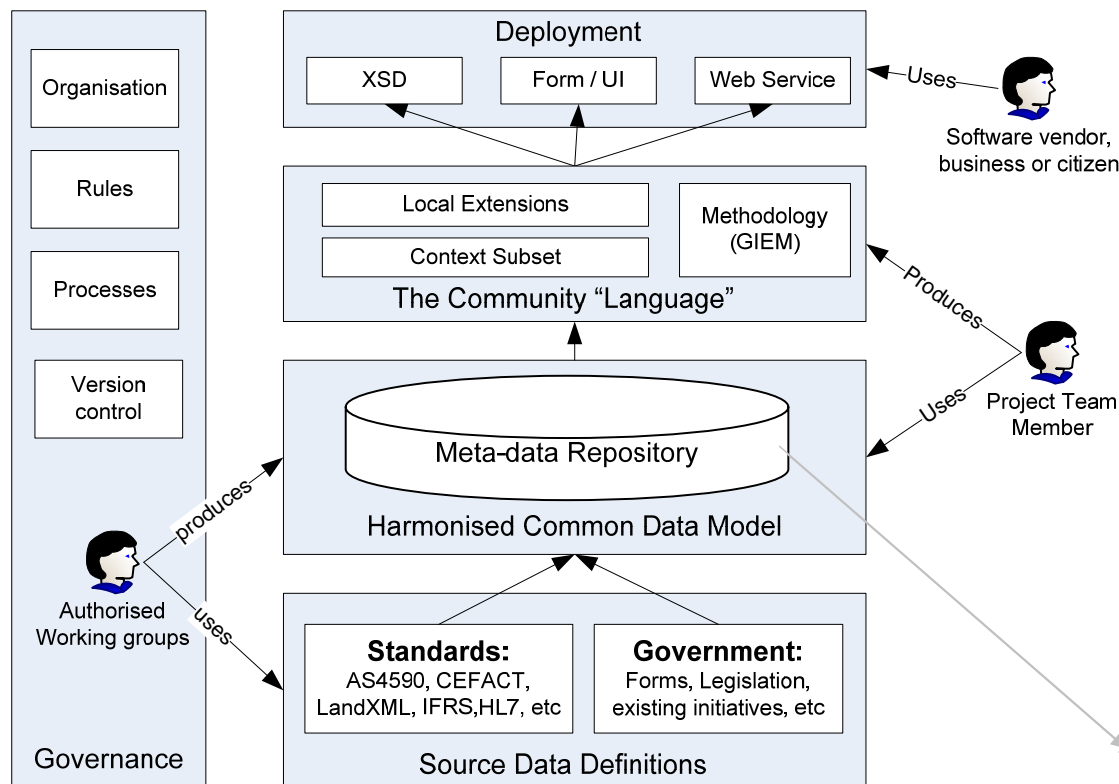
The “Government Information Exchange Methodology” (GIEM) provides the tools and methods to define standards.

GIEM draws on best practices from UN/CEFACT, ISO-20022, 11179, HL7, RosettaNet and OMG

Tools include a meta-data repository and UML tool support.

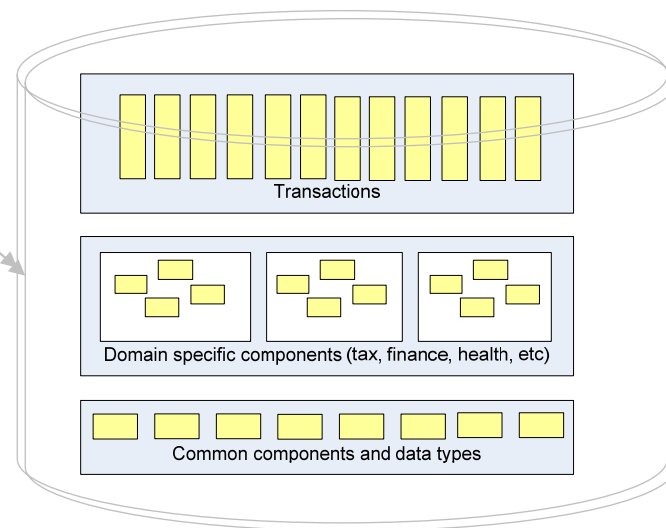
SOLUTION COMPONENT GOVDEX REPOSITORY & MODELLING TOOLS

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Authorised working groups create harmonised information models.

Projects teams re-use the models in context and generate schema.



Examples:

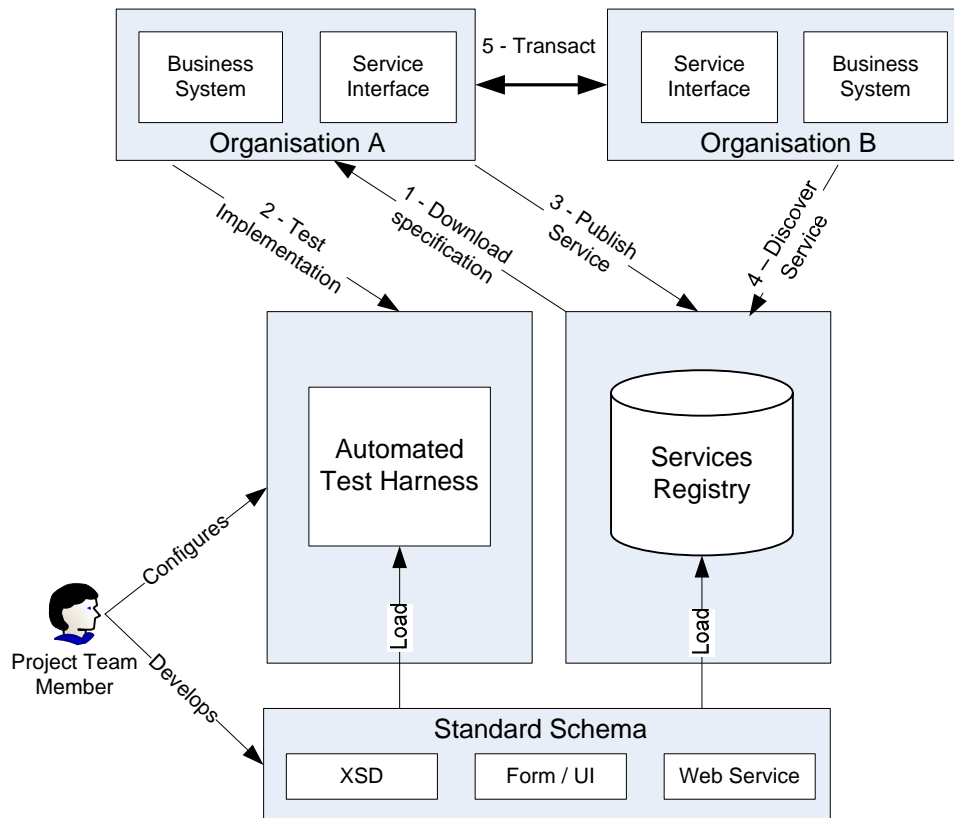
Source: <http://www.saiglobal.com/shop> local

Models: <http://xml.gov.au/pub/> local

Schema: <https://www.govdex.gov.au/registry/index.do> local

SOLUTION COMPONENT: GOVDEX TEST HARNESS & SERVICE REGISTRY

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The community standard schema (XSD, WSDL, etc) are published to the Services Registry. A test service is configured in the test harness.

Agencies & businesses test their implementations, register their services, bindings & policies.

Like the “phone book” for the integrated community.

LESSON: GOVERNANCE IS KEY

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Without some governance, this all turns to chaos!

At the legal / commercial level

- *Collaborative head agreements*
- *IP Ownership*
- *Maintenance revenue stream*

At the information / semantic level:

- *Ownership of data domains (tax, Finance, Health, etc)*
- *Development process, version control*
- *Extensions & contributions*

At the web service / transactional level:

- *Testing service interfaces*
- *Interface policy & security*
- *Change control*
- *Security & authentication*

Centrally defined “interoperability frameworks” tend to remain “shelf-ware” unless they can deliver practical tools and are actively used in key reference projects. This is the case in Australia and is probably much worse in the EC!

Critical Success Factors for SEMIC

- Engage with EC level policy agendas that can provide focussed goals. Eg:
 - Trade Facilitation (eg dangerous goods movements)
 - Environmental (eg carbon trading)
 - Internal security (eg tracking “persons of interest”)
 - Fraud detection (eg property registers, tax evasion)
- Accept jurisdictional independence (eg national standards and map to EU common standards)
- Provide strong governance for SEMIC data models
 - Clear Architecture (ie data domains and provenance model)
 - Trusted open development (organisation, participation, process)
 - Stability (version control & release management)
- Provide Practical tools & methods – and on-going funding for support

Thanks for listening!

Questions can be addressed to:

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Take a look at:

www.govdex.gov.au