



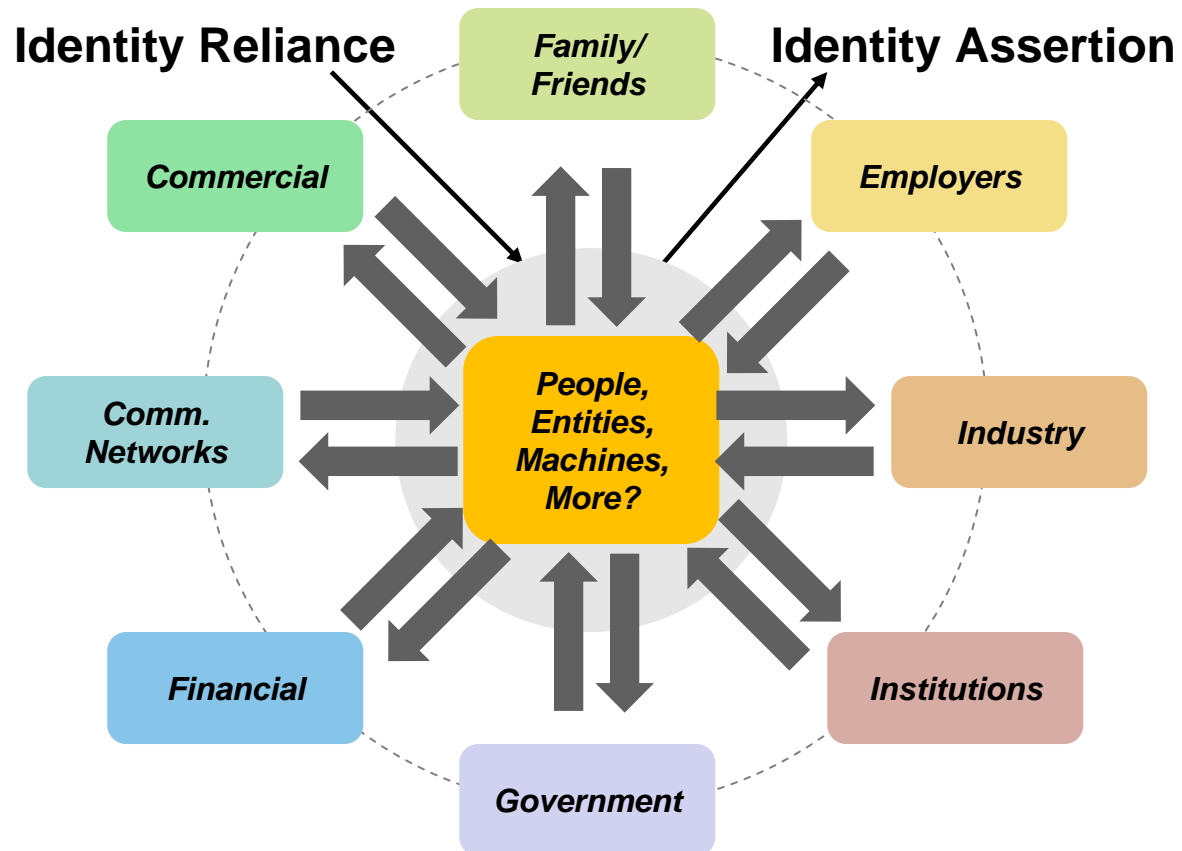
Real World Identity Assurance: Wells Fargo Demonstration of Identity Assurance Principles In Action

August 6, 2008

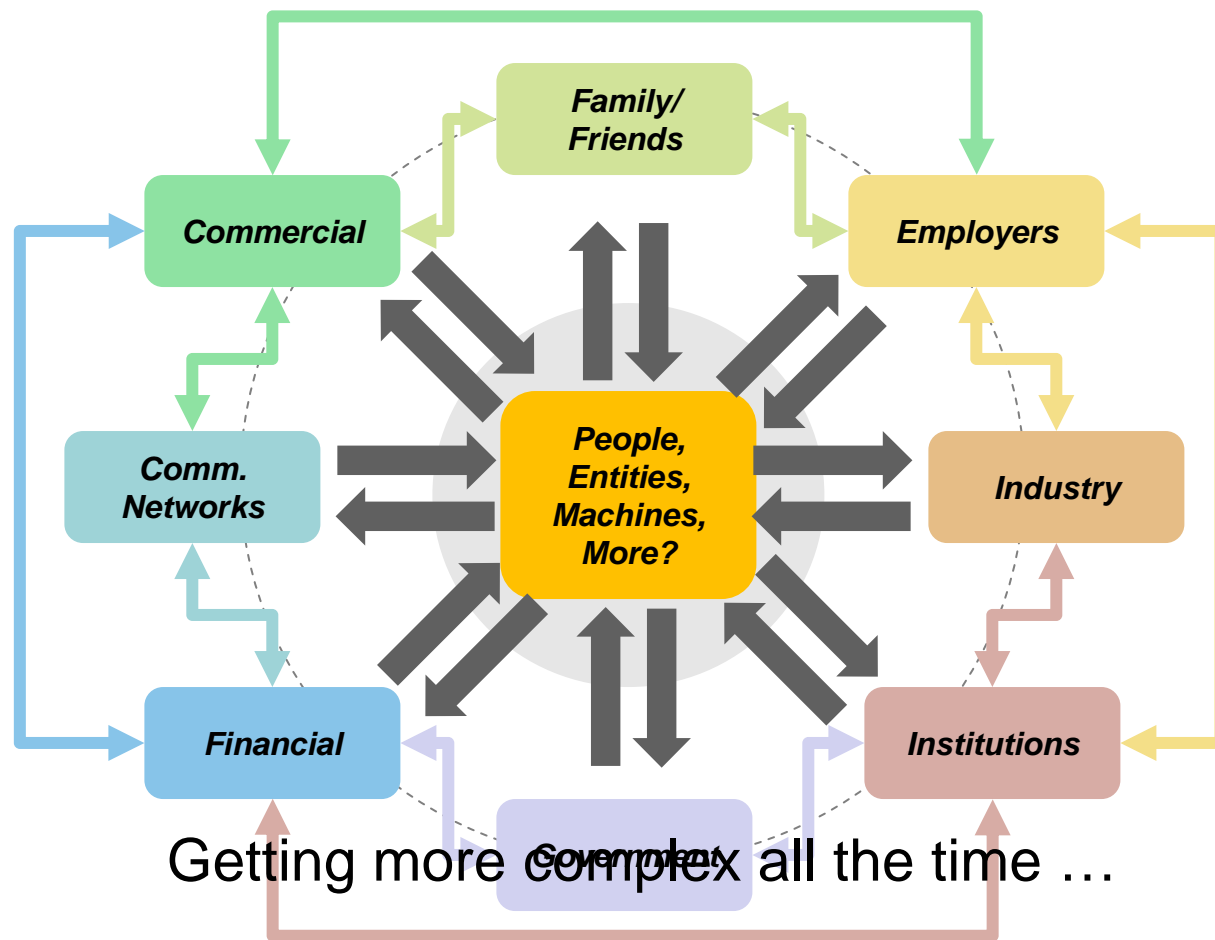
Jim Gross

Senior Vice President, Wells Fargo
WellsSecure® Trusted Identity Service

The General Ecology

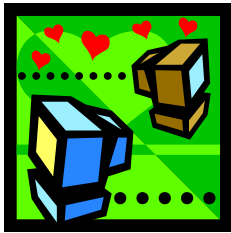


The General Ecology





Why Do They Have To
Be So Difficult
Can't They Just Learn
To Get Along?



My 2.0 Agents



Buying Stuff



Getting In The Door

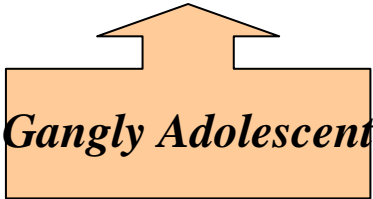


Always With Me

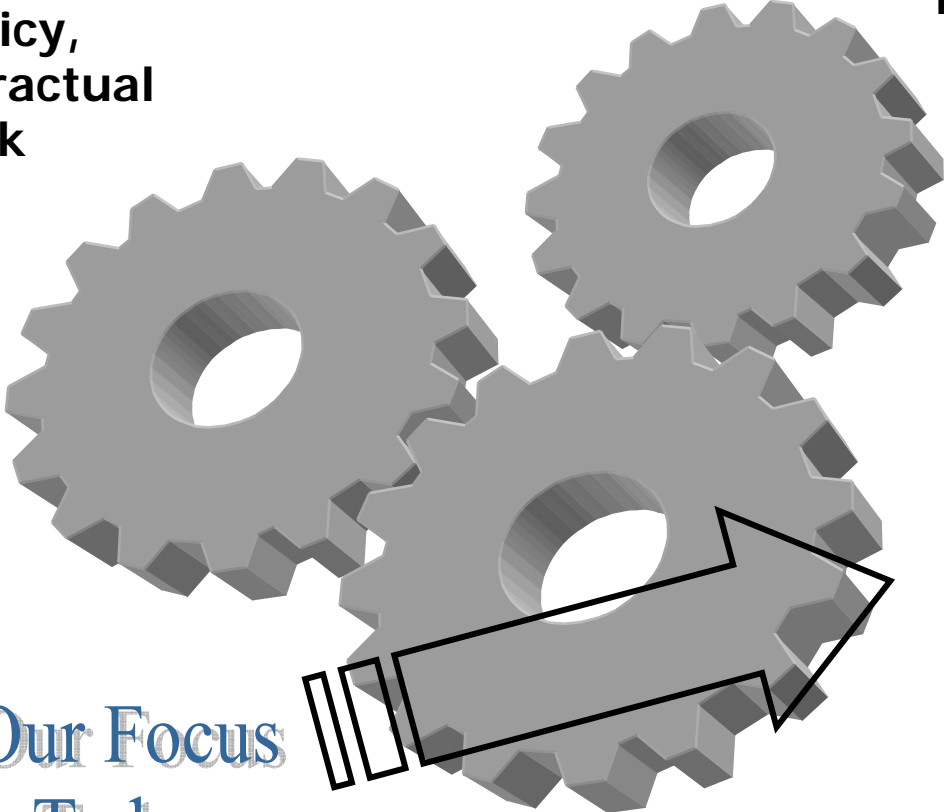
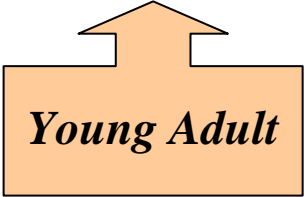


It Takes Two To Tango

**Interoperable
Business Policy,
Rules and Contractual
Framework**



**Interoperable
Hardware, Code and
Network Specs.**



*Our Focus
Today*

**Common
Identity Assurance
"Drive Train"
Across The Identity
Ecology**

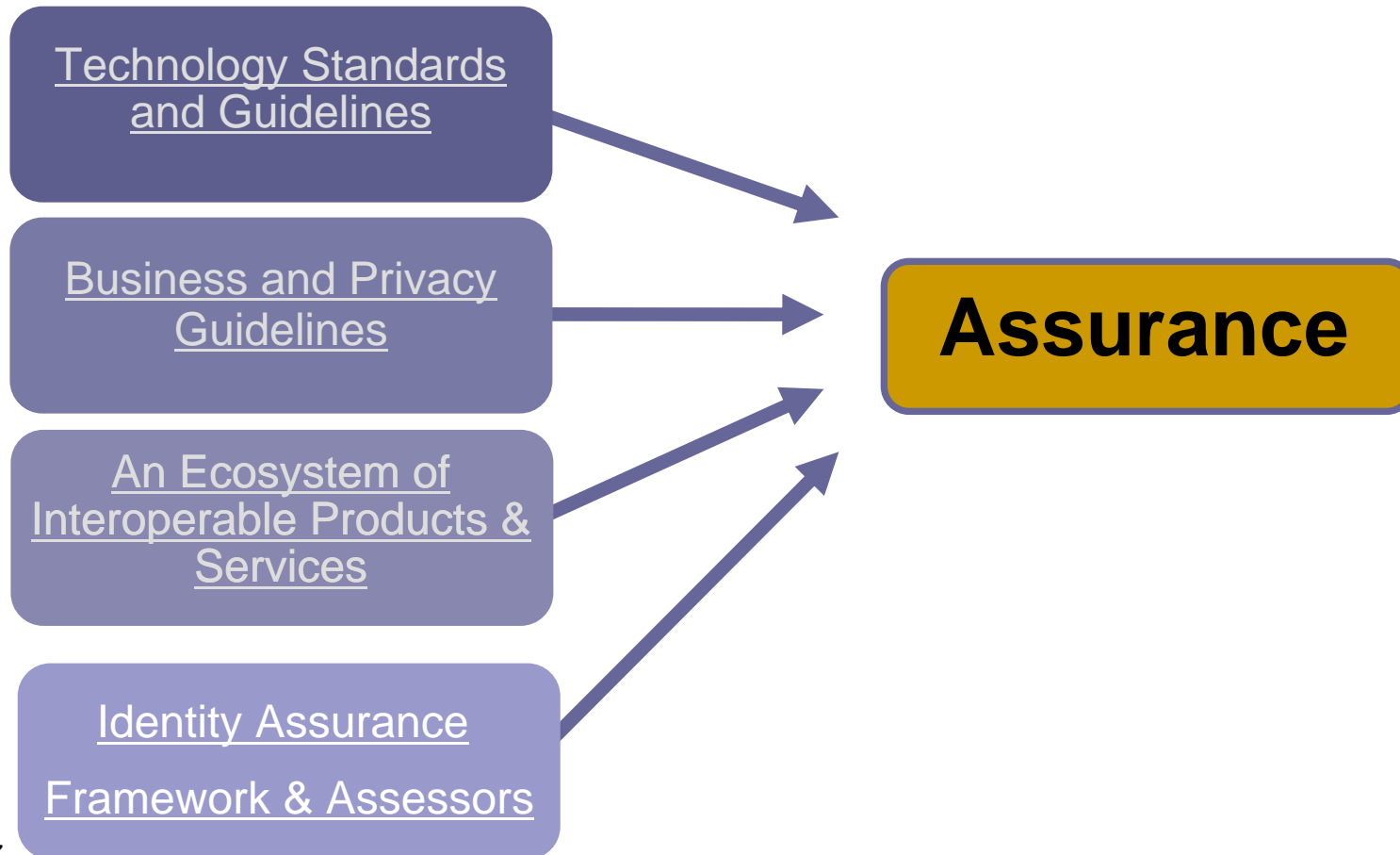


Identity Assurance Is The Key Business Driver

- **Standard, broadly accepted Levels of Assurance** allow relying parties (or their agents) to readily determine, on the fly, their confidence in an identity credential
 - Desired results are:
 - **Less complex/more rapid deployment** of digital identity services
 - Operational streamlining of **identity service provider certification/accreditation processes** for entire industry
- **Liberty Alliance IAF (Identity Assurance Framework)**
 - Objective is to create a framework of baseline policies, business rules and commercial terms against which identity assurance services can be assessed and certified
 - Check out the public draft (for comment) at:

http://www.projectliberty.org/resource_center/specifications/liberty_alliance_identity_assurance_framework_iaf_1_1_specification

Liberty Focus



Liberty's Global Membership

150 diverse member companies and organizations representing leaders in IT, mobility, government, service provision, system integration and finance working collaboratively to address the technology, business and policy aspects of digital identity management

Management Board



Sponsors



IAF Assurance Level Policy Overview

- **Level of trust is associated with the strength and rigor of the identity-proofing policy and practices statements joined to an identity credential**
- **Four Primary Levels of Assurance**
 - Level 1 – little or no confidence in asserted identity’s validity
 - Level 2 – Some confidence
 - Level 3 – High level of confidence
 - Level 4 – Very high level of confidence
- **Use of Assurance Level is determined by Relying Party risk and the level of authentication rigor necessary to mitigate a given risk(s)**
- **CSP’s (Credential Service Providers) are certified by Federation Operators to offer services at the given assurance level(s)**

Assurance Level Criteria Overview

Assurance Level	Example	Assessment Criteria - Organization	Assessment Criteria – Identity Proofing	Assessment Criteria – Credential Mgmt
AL 1	Registration to a news website	Minimal Organizational criteria –	Minimal criteria - Self assertion	PIN and Password
AL 2	Change of address of record by beneficiary	Moderate organizational criteria	Moderate criteria - Attestation of Govt. ID	Single factor; Prove control of token through authentication protocol
AL 3	Access to an online brokerage account	Stringent organizational criteria	Stringent criteria – stronger attestation and verification of records	Multi-factor auth; Cryptographic protocol; “soft”, “hard”, or “OTP” tokens
AL 4	Dispensation of a controlled drug or \$1mm bank wire	Stringent organizational criteria	More stringent criteria – stronger attestation and verification	Multi-factor auth w/hard tokens only; crypto protocol w/keys bound to auth process

How IAF Certification Will Unfold

- **Initially focused on the use of credentials for authentication, targeting CSP's (Credential Service Providers)**
- **Liberty Alliance (LAP) provides accreditation of assessors who will perform certification assessment**
- **Federation Operators will require LAP-accredited assessments**
- **Provides guidelines for how all involved parties (relying parties, CSP's and Federation Operators) may work together**
- **LAP will maintain the Identity Assurance Framework and provide a current list of accredited assessors**

With the IAF in final draft, development of the assessment and assessor accreditation programs is the Liberty Identity Assurance Expect Group's top 2008 priority



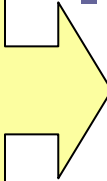
Identity Assurance Principles In Action: Use Cases

Use Case: Annuity Funds Transfer

- **Initiation/transfer of \$XXMM from demand deposit account to third party annuity product provider**
 - Basic customer financial institution requirement: customer authentication onto network and application in order to submit request. *Existing tools satisfy requirement.*
 - Further requirement: customer authorization to submit request. *Existing tools partially satisfy requirement.*
 - But, do both the financial institution and the third party have high assurance that the identity credential submitted can *non-repudiably* represent the customer and other dependent parties? *IAF framework and supporting network deliver this capability.*

• This is where we lose STP traction today

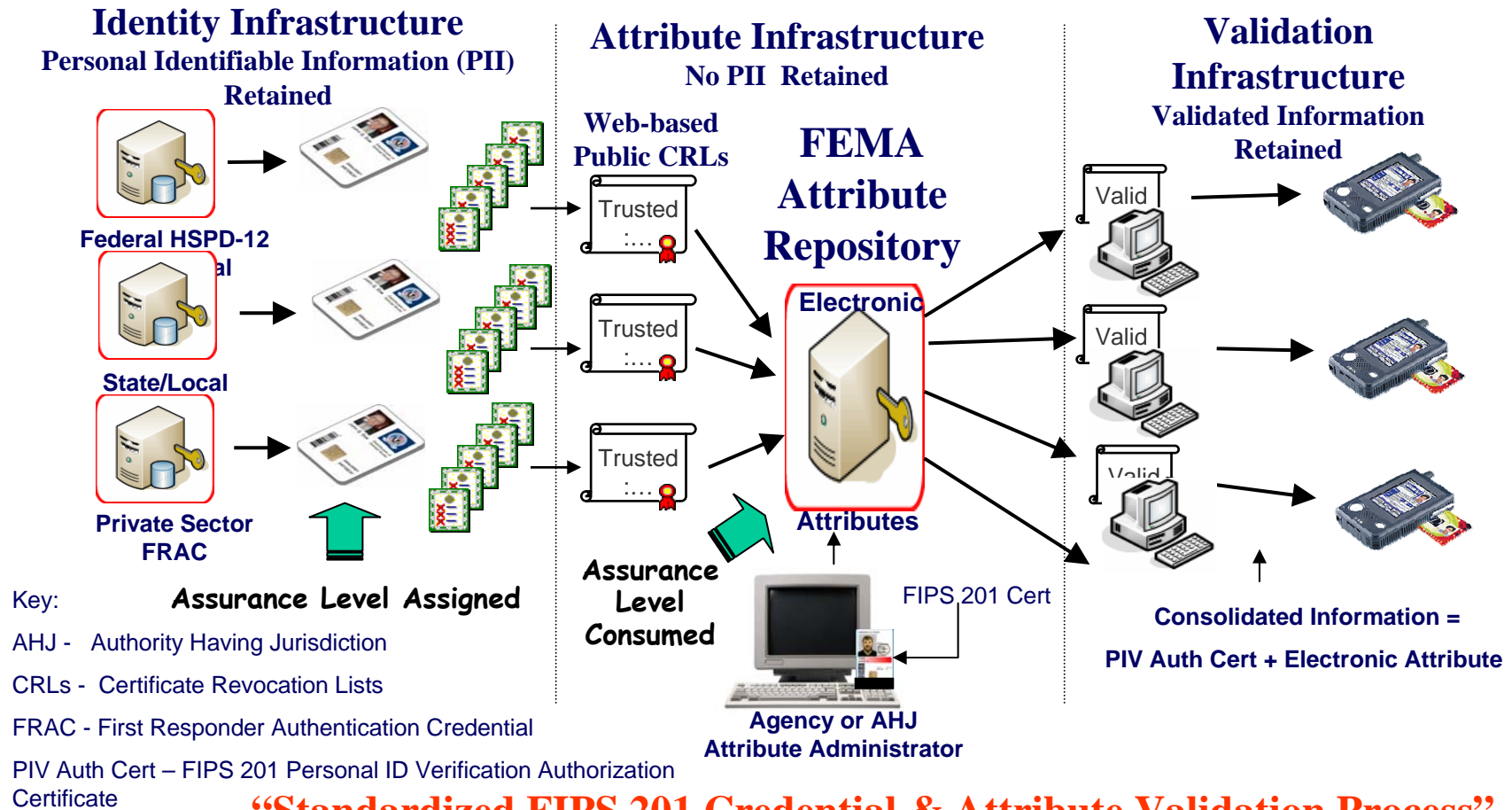
• And it gets messier as Web 2.0/SOA unfolds



Identity Assurance Use Case: Physical Access

- **Physical access to storage facility containing negotiable documents**
 - Facility maintains directory of identities authorized to enter
 - Person x is authorized to enter, but does not have a facility access card to allow authorized entry
 - Person x does holds a payment card that also holds a high assurance identity credential
 - Person x can be authorized to enter without further effort via assurance level match

Identity Assurance Use Case: First Responders



“Standardized FIPS 201 Credential & Attribute Validation Process”

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Graphic and content courtesy of Tom Lockwood, DHS

Real World Identity Assurance Use Case/Deployment

- **US Federal: GSA eOffer procurement site acceptance of federated WellsSecure® certificates**



Contact Information

**Thank You
FOR YOUR TIME**



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