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Privacy Protection in the APEC Framework: The Potential of Technological Tools

Purpose: Information
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Privacy Protection in the APEC Framework : The Potential of Technological Tools

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The Role of Technology Generally

- Technology is a toil that works in conjunction with, and support of, appropriate policies, practices and procedures

- First develop a privacy policy consistent with the applicable framework, establish the operational practices and determine the procedures.

- Understand the technology tools/functions available

- Optimize for the needs of the organization

Technology In Support Of Multiple Organization Needs

- Too often technology implementations do not support privacy because the "needs" are traded off against each other.

- There is a need to accomplish organization objectives, to secure information and also to protect privacy rights – ALL can be optimized.

- Many of the same functions that enable security and other organization functions also enable privacy

The Myth of Privacy Enhancing Technologies

- Too often people only focus on those technologies that are designed to support privacy as the only technology tools that support privacy

- The vast majority of software that is used by an enterprise of any size may be able to support privacy requirements.

- It can only do so, however, if its configured with privacy as one of the objectives

Privacy Supported in Technology

- Authentication: Who is the end user, who are the users accessing the system on the inside
    - Identity Management
- Authorization: What rights to authenticated users have?
    - Tied to HR system allows for updated management upon change of roles
- Access control: Based on user identity and rights, what content can user access
- Audit: Has user behavior contravened policy
    - Selective audit, fine grain audit, investigatory functions
- Encryption: stored and in transit

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Database Technology and the APEC Framework

Framework Concept	**Tool**
Specify Uses of PII	Meta data and permissions
Choice	Role based access controls
Integrity	Application based controls
Security	Recovery to previous state
Access and Correction	Defense in depth
Accountability	Label Security, VPD
	Encryption
	Security alerts
	Audit controls

http://www.oracle.com/technology/deploy/security/db_security/index.html

Supporting Today's Information Flows: Policy and Tech

Commercial/E-government

Privacy Policy

Privacy Notice

Internal controls/PIA

Training

Accountable sharing

Compliance and governance

Complaint handling

Enforcement

Implementation

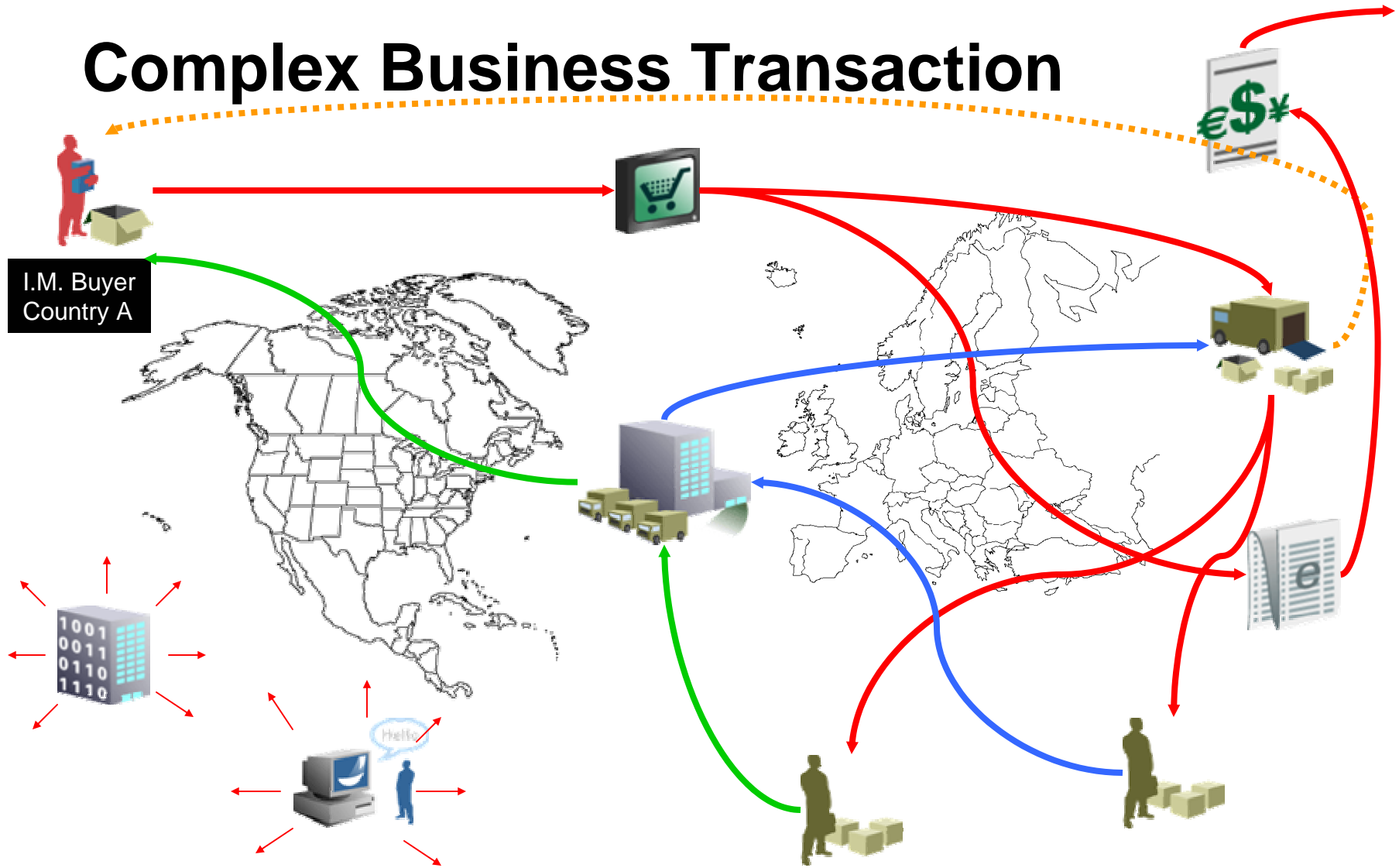Practices and procedures

Short form

Technology tools

E-learning

Agreements, MOU, Bridge…

Policies and Rules

Customer service training
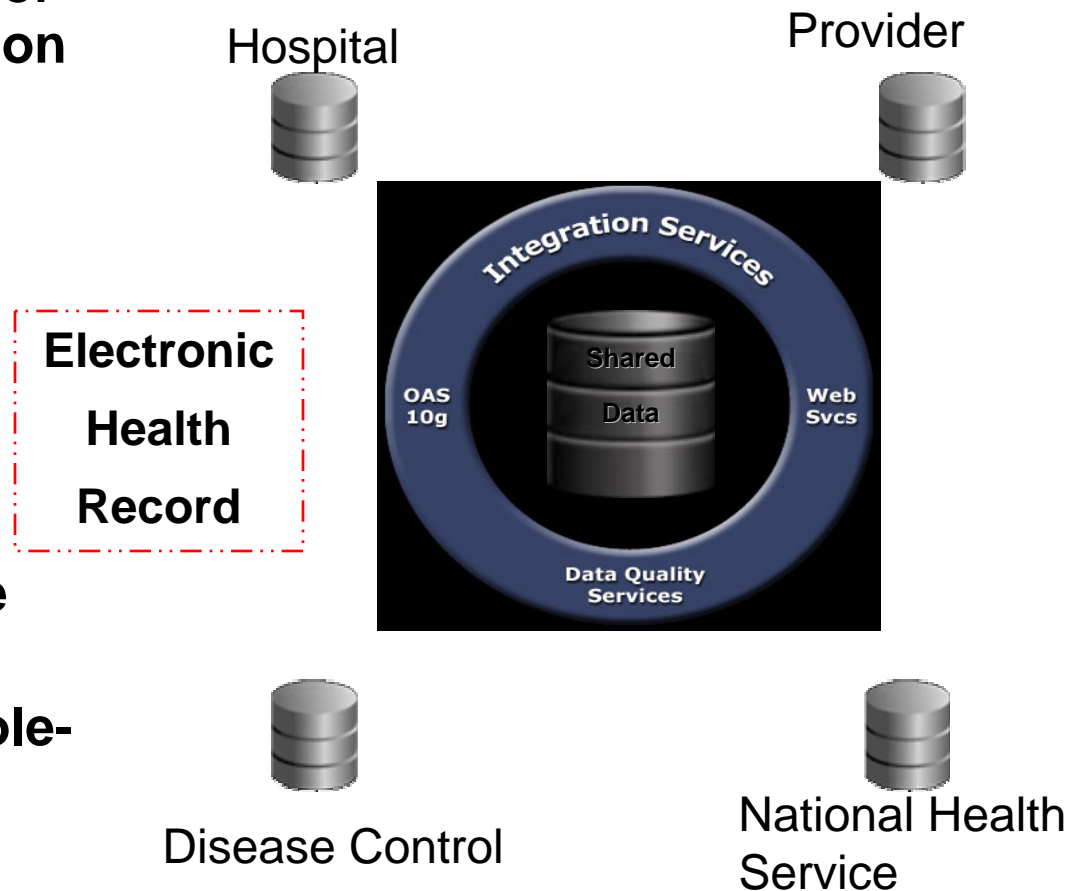
Internal procedures and cooperation with authorities

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Complex Business Transaction

I.M. Buyer
Country A

E-government Citizen Services Hub

- **Single source of truth for customer/event definition**
- **Near real-time data synchronization**
- **Data cleansing**
- **Key interactions**
- **360 degree view of data with pre-built analytics**
- **Local control of source info**
- **Appropriate rule and role-based sharing**
- **Supports compliance**

Hospital

Provider

Electronic

Health

Record

Integration Services

OAS 10g

Shared Data

Web Svcs

Data Quality Services

Disease Control

National Health Service

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Centralization and Compliance

Centralization of information may actually increase privacy

- Fault tolerant grid infrastructure

- Single Sign On - Password confusion limited

- Bastion security approach – both moat and security guard models

- Single view of user aids in compliance

- Compliance choke points

    – Privilege management

    – Accountability framework

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In Conclusion

- Technology is a facilitating tool, not an end
- You must consider the needs of the organization, including privacy and then optimize the configuration
- Most software has privacy functionality
- Consider the overall information flows and the legal, technology and policy frameworks as well as your overall customer/citizen relationship

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