The Value of PKI in Achieving the Vision of E-Government

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# E-Government is a Major Management Initiative for the Federal Government

The Vision: an order of magnitude improvement in the federal government's value to the citizen.

The Definition: the use of digital technologies to transform government operations in order to improve effectiveness, efficiency, and service delivery.
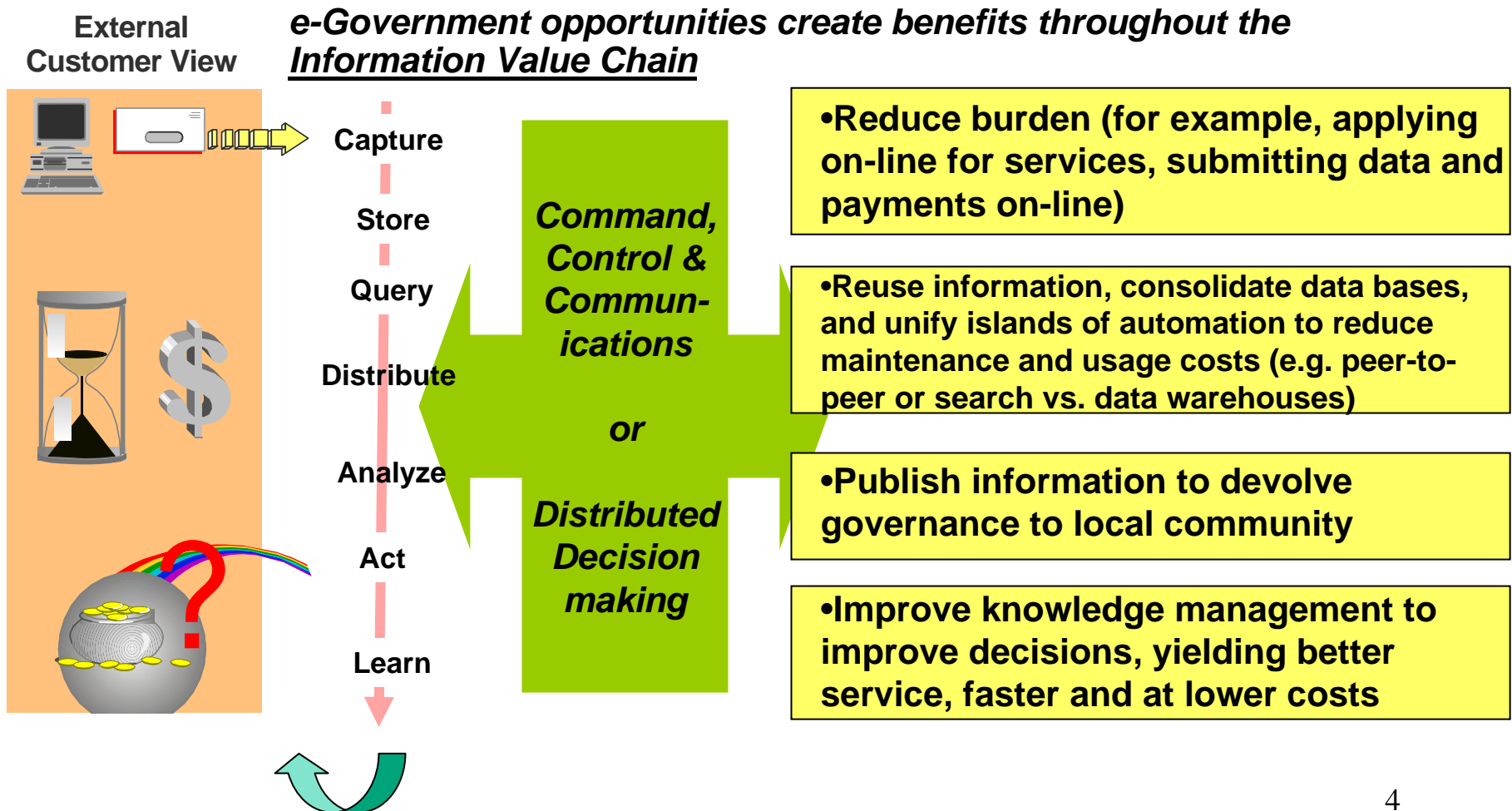
The Principles:
- *Integral component of President's Management Agenda*
- *Market-based, Results-oriented, Citizen-Centered*
- *Simplify & Unify*

The Emerging E-transaction Landscape Creates a Web of Information Interdependency

Intra-agency

Inter- and Intra-governmental

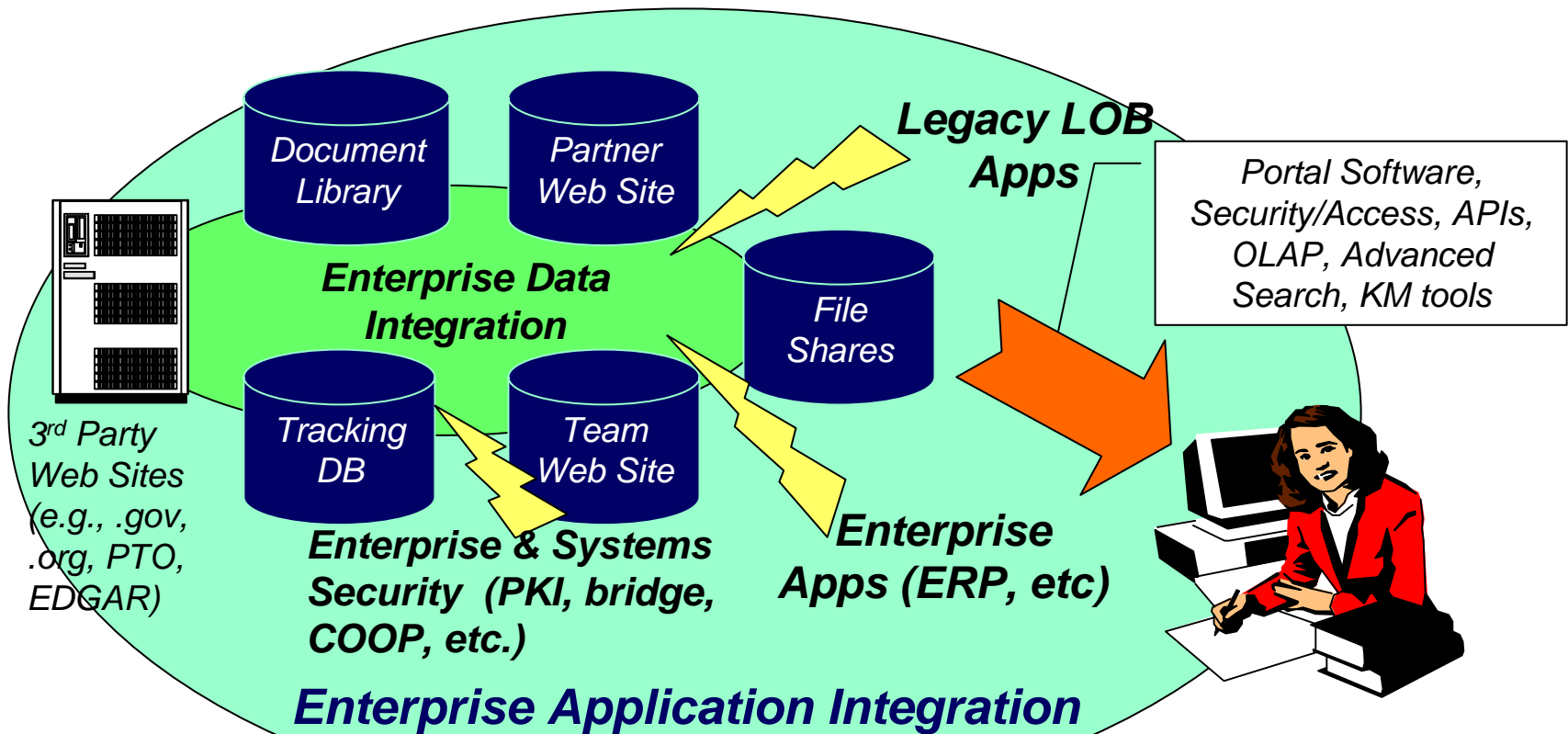**Agency to business**

Agency to the public
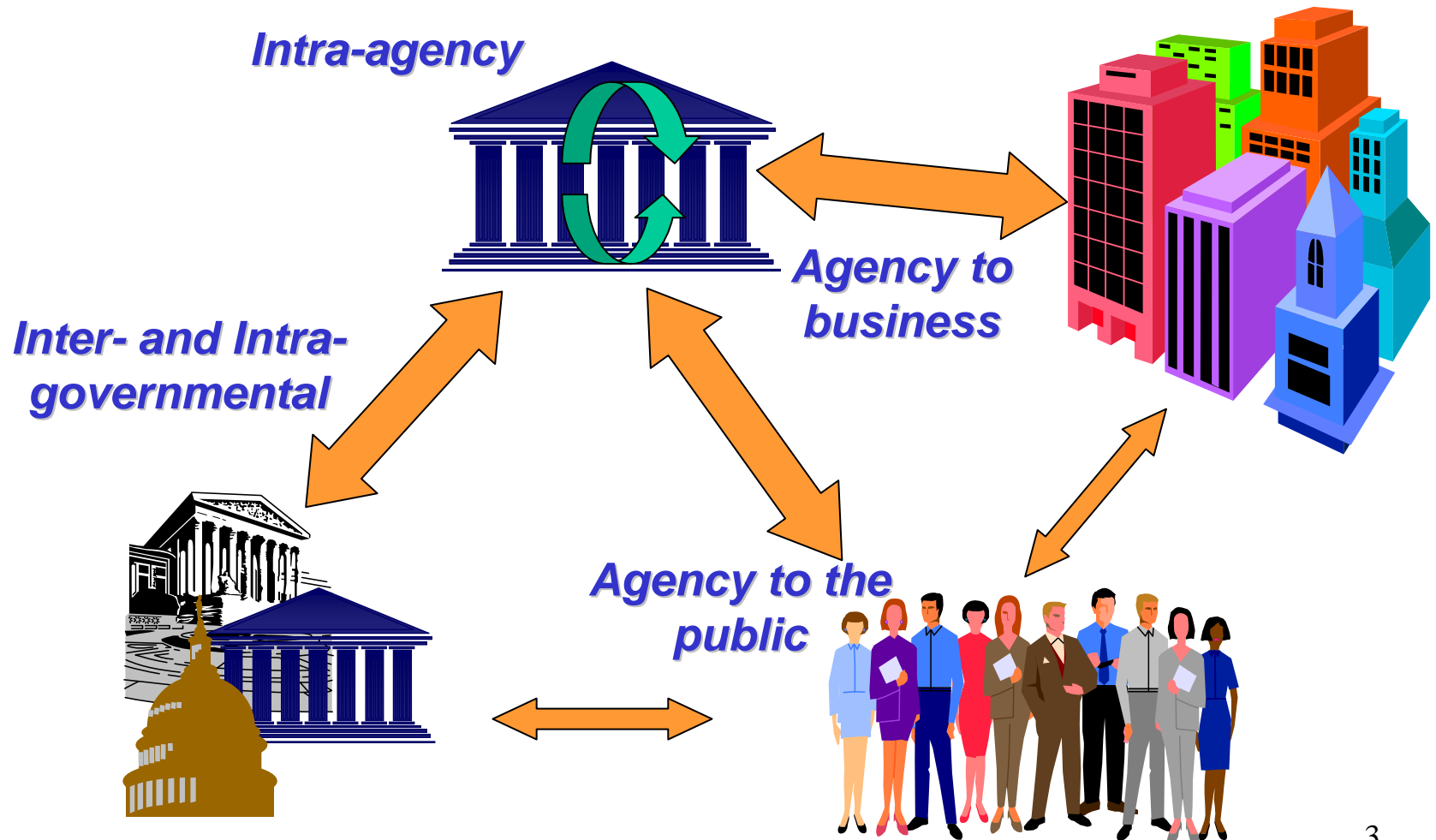
What does this mean?
Users Must Have a Unified View of data and Simple Business Processes In order to Reap Benefits From Emerging Web Services Technologies

External Customer View

e-Government opportunities create benefits throughout the <u>*Information Value Chain*</u>

Capture

Store

Query

Distribute

Analyze

Act

Learn

Command, Control & Commun-ications

or

Distributed Decision making

- **Reduce burden (for example, applying on-line for services, submitting data and payments on-line)**

- **Reuse information, consolidate data bases, and unify islands of automation to reduce maintenance and usage costs (e.g. peer-to-peer or search vs. data warehouses)**

- **Publish information to devolve governance to local community**

- **Improve knowledge management to improve decisions, yielding better service, faster and at lower costs**

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The Emerging Government Knowledge Worker will rely on Enterprise Information Platforms

Document Library

Partner Web Site

Legacy LOB Apps

Portal Software, Security/Access, APIs, OLAP, Advanced Search, KM tools

Enterprise Data Integration

File Shares

3rd Party Web Sites (e.g., .gov, .org, PTO, EDGAR)

Tracking DB

Team Web Site

Enterprise & Systems Security (PKI, bridge, COOP, etc.)

Enterprise Apps (ERP, etc)

Enterprise Application Integration

How do we secure the applications, data and environment while accelerating and improving decisions? Should there be government specific approaches?

E-Government Strategy:
Initiatives Require Security & Privacy

Government to Citizen

1. USA Service
2. EZ Tax Filing
3. Online Access for Loans
4. Recreation One Stop
5. Eligibility Assistance Online

Government to Business

1. Federal Asset Sales
2. Online Rulemaking Management
3. Simplified & Unified Tax & Wage Reporting
4. Consolidated Health Informatics (business case)
5. Business Compliance One Stop
6. International Trade Process Streamlining

Government to Government

1. e-Vital (business case)
2. e-Grants
3. Disaster Assistance and Crisis Response
4. Geospatial Information One Stop
5. Wireless Networks

Internal Effectiveness and Efficiency

1. e-Training
2. Recruitment One Stop
3. Enterprise HR Integration including e-Travel
4. Integrated Acquisition
5. e-Records Management

E-Government Strategy: Solutions to Key Barriers Incorporate PKI

Barrier	Solution
Agency Participation	- Sustained high level leadership and commitment using PMC, Dept and Agency E-Government Leaders - Establish Interagency governance structure (PMC, Steering Groups/Councils, Multi-agency partnership) - Give priority for cross agency work - Engagement of Interagency user/stakeholder groups, including Communities of practice
Federal Architecture	- OMB leading business & data architecture rationalization - OMB sponsored architecture development for cross agency projects - Firstgov.gov as the primary on-line delivery portal for G2C, G2B
Public Trust	- Establish Secure transactions and Identity Authentication through GSA eAuthentication project - all eGov will use - Incorporate privacy protections into each business plan - Engage in public promotion
Resources	- Move resources to programs with greatest return and citizen impact - Set measures up-front and use to monitor implementation - Provide online training to create new expertise among employees/contractors
Stakeholder resistance	- Create comprehensive strategy for dealing with appropriation committees - Argue for initiatives collectively

More Broadly, OMB is Pursing a Five-Part Approach

- **Business Cases must document security requirements and costs (policies, staff & training, processes, testing, IT)**

- **Agency Capital Planning process must document that adequate security controls are incorporated into life cycle plans and funding for each system**

- **Project Matrix -- systems analysis of cybersecurity**

- **Agency annual GISRA reports and corrective action plans must reflect agency spending priorities (including system needs, patches, etc.)**

These must lead to clear audit trails that link needs, corrective action plans and agency spending priorities (including business cases)

As we look to the future, what role does PKI play?

- **We can leverage PKI to help meet the needs of upcoming mandates such as GPEA, HIPPA and others.**
- **PKI is a facilitator of unifying islands of automation**
- **PKI is not the answer for all applications but for specific applications it can add the required authentication necessary for a trustworthy e-gov environment.**
- **eAuthentication initiative managed by GSA will organize authentication work for our critical lines of business**