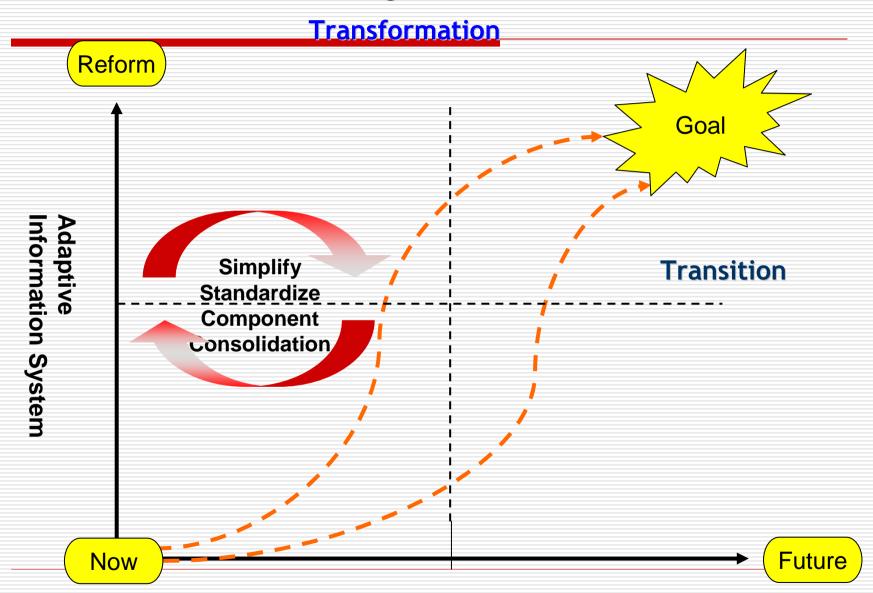
eGov Shared-Service Development and Experience Sharing

International Symposium on Grid Computing 2007 Academia Sinica, Taiwan 27 March 2007

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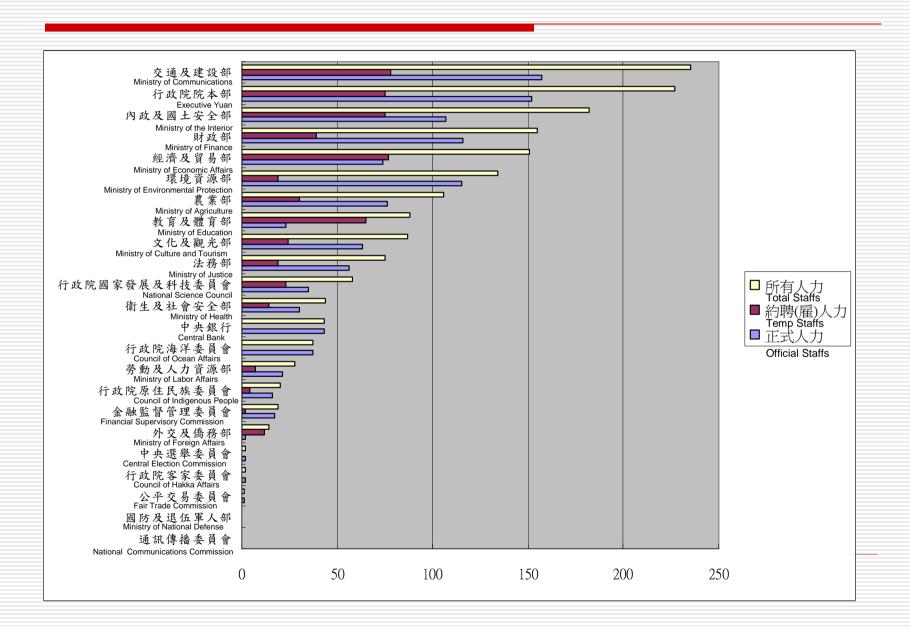
Goals for IT and Organization Reform



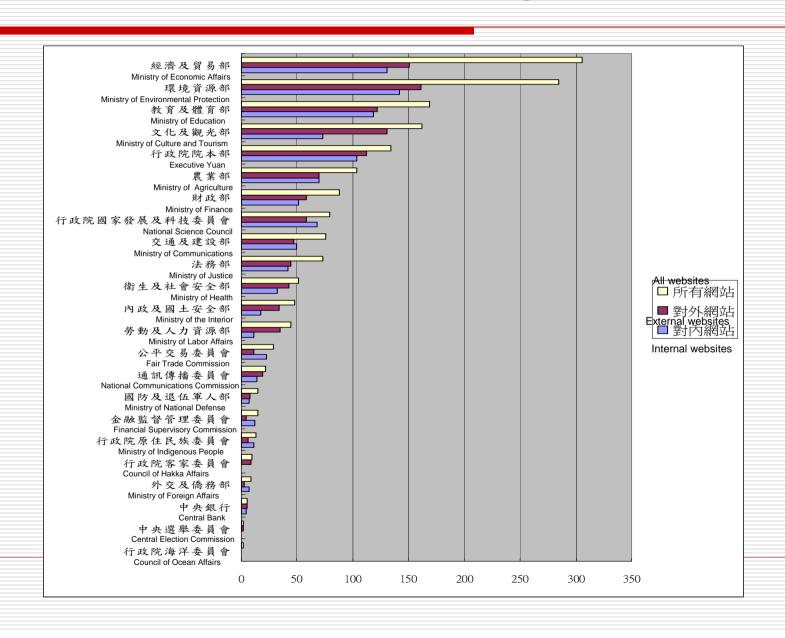
eGov IT Reform Assessment: Data Collection

- □IT System/Service Assessment
 - ■2005 : 210 interview
 - **2006**: 286 interview
- □ Focus group discussion
 - ■Requirement identification
 - ■IT resource consolidation evaluation

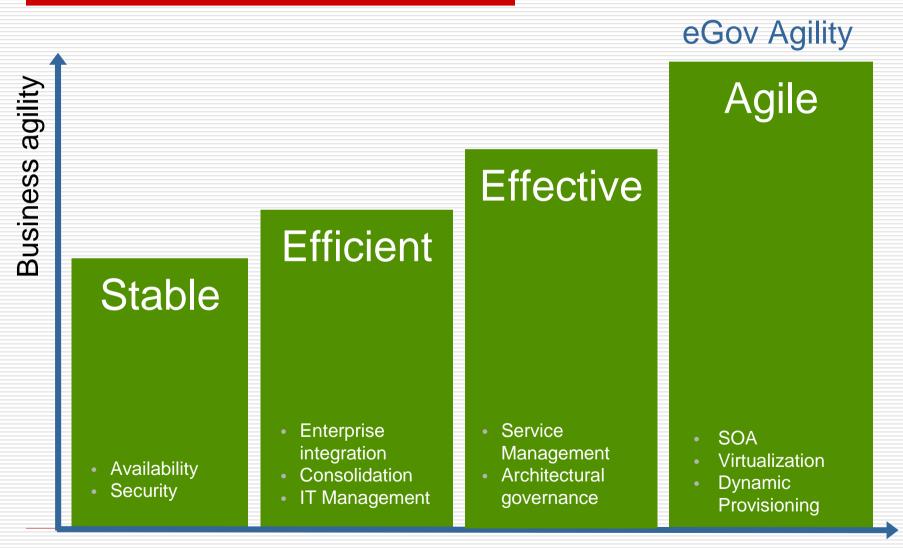
Government Agencies vs. IT Man Power



Websites for Government Agencies



Phased eGov IT Reform



IT adaptability

Research finding - potential consolidation(1)

- Common Info Systems
 - Executive Yuan
 - Ministry of Finance
 - Ministry of Economic Affairs
 - Ministry of Communication
 - Ministry of Environmental Protection
 - Ministry of Agriculture
 - Ministry of Education
 - Ministry of Foreign Affairs
 - National Science Council
 - Council of Labor Affairs
 - National Communication Commission

- Information Infrastructure
 - Executive Yuan
 - Ministry of the Interior
 - Ministry of Finance
 - Ministry of Communications
 - Ministry of Environmental Protection
- Data Centers
 - Ministry of the Interior
 - Ministry of Finance
 - Ministry of Economic Affairs
 - Ministry of Health
 - Ministry of Environmental Protection

Research finding - potential consolidation(2)

- Internal / External Websites
 - Executive Yuan
 - Ministry of Finance
 - Ministry of Economic Affairs
 - Ministry of Communications
 - Ministry of Health
 - Ministry of Environmental Protection
 - Ministry of Agriculture
 - Ministry of Education
 - National Science Council
 - National Communication Commission

Research finding - potential risk

□Information System Dependency

			Risk of Reform	
Org	Туре	IT Systems	Complexity of Dependency	Impact
Executive Yuan	Α	284	26%:High	28%:High
Ministry of the Interior	A	212	24%:High	23%:High
Ministry of Finance	A	729	46%:High	45%:High
Ministry of Economic Affairs	A	499	23%:High	25%:High
Ministry of Environmental Protection	A	486	26%:High	28%:High
Ministry of Agriculture	В	296	9%:High	13%:High
Ministry of Education	В	311	18%:High	19%:High

Research finding - potential risk

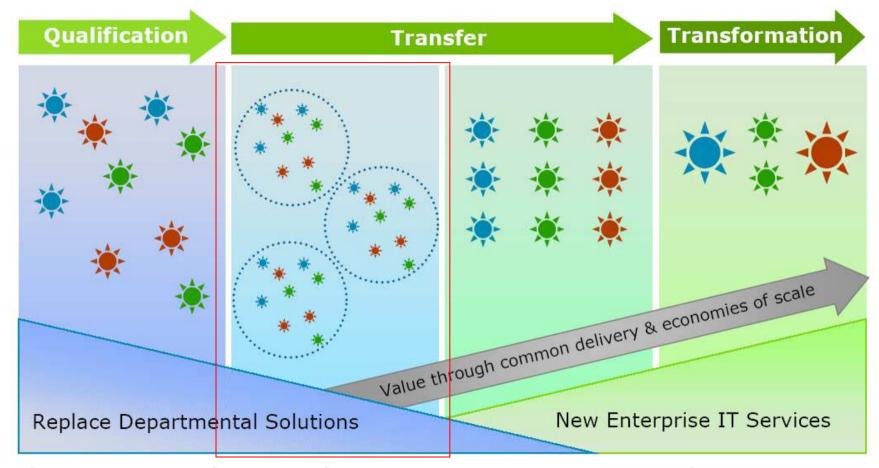
□Importance of IT System

Ora	Туре	IT Systems	Importance of IT System	
Org			Utilization	Business Impact
Executive Yuan	A	284	5% very high; 47%:high	7%:very high; 40%:high
Ministry of the Interior	A	212	2%:very high; 40%:high	2%:very high; 39%:high
Ministry of Finance	A	729	22%:very high; 35%:high	34%:very high; 32%:high
Ministry of Economic Affairs	A	499	4%:very high; 39%:high	3%:very high; 34%:high
Ministry of Communications	A	252	2%:very high;67%:high	4%:very high; 16%:high
Ministry of Health	A	212	8%:very high; 66%:high	9%:very high; 57%:high
Ministry of Environmental Protection	A	486	8%:very high;44%:high	7%:very high; 33%:high
Ministry of Agriculture	В	296	7%:very high; 71%:high	6%:very high; 58%:high
Ministry of Education	В	311	7%:very high; 66%:high	10%:very high; 34%:high
Ministry of Foreign Affairs	В	15	0:very high; 60%:high	20%:very high; 60%:high

Research finding - potential risk

□Inconsistent utilization between data center and IT system

Org	Туре	Data Center Utilization	Importance of IT System	
			Utilization	Business Impact
Ministry of Finance	A	Low	22%:very high; 35%:high	34%:very high; 32%:high
Ministry of Health	A	Low	8%:very high; 66%:high	9%:very high; 57%:high
Ministry of Environment Protection	A	Low	8%:very high; 44%:high	7%:very high; 33%:high
Ministry of Agriculture	В	Middle	7%:very high; 71%:high	6%:very high; 58%:high
Ministry of Education	В	Middle	7%:very high; 66%:high	10%:very high; 34%:high
Ministry of Foreign Affairs	В	Low	0:very high; 60%:high	20%:very high; 60%:high



Government Shared Services Development in Canada

Roadmap for Government IT Transformation

Integration

Application & process integration

- Application rationalization
- Database rationalization
- Enterprise integration (Effective)

Resource Sharing

SOA/IT utility

- Utility based resource
- Shared service centers
- Instant service provisioning (Agility)

Consolidation

Data center consolidation

- Physical security
- Hardware relocate and consolidate
- Enterprise management
- Network consolidation
- **Business** continuity (Stable)



Distribution

Information resources dispersed



- Standardize
- Scalable computing resource
- Centralize data repository (Efficient)





Rationale for IT Reform and Consolidation

Economic efficiency

- Inconsistent utilization between IT systems and data center
- Infrastructure consolidation can be the first step for IT reform
- IT resources consolidation will improve data center utilization and efficiency of resource management
- Initial IT transformation will be the foundation of government shared service

■Data center consolidation

- Workshops and surveys have been conducted regarding IT reform issues.
- Data center consolidation is the consensus of governmental agencies.

Design Principle for Adaptive eGov IT

Simplify

- Reduce number of elements
- Eliminate customization
- Automate change

Standardization

- •Use standard technologies and interfaces
- Adopt common architectures
- Implement standard processes

Component

- Break down monolithic structures
- Create reusable components
- Implement logical architectures

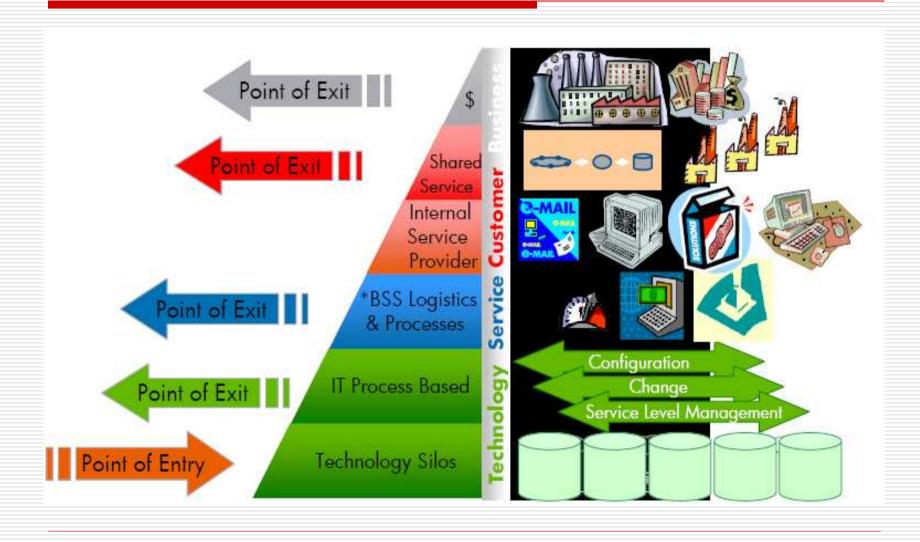
Consolidation

- Link business and IT
- Connect applications and business
- Processes within & outside enterprise

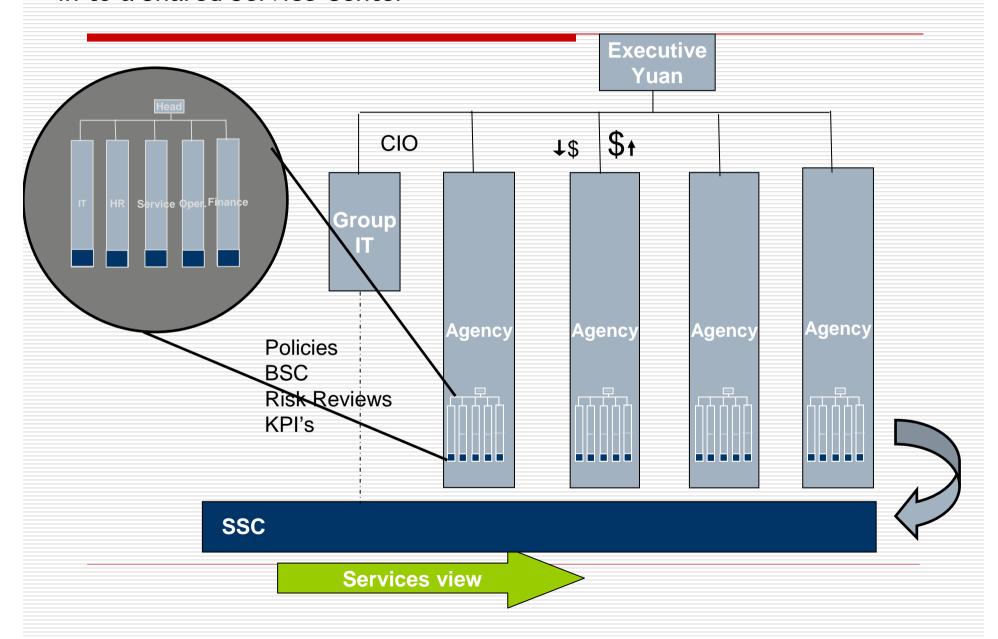
Applied consistently across:

- •Business processes
- Applications
- •Infrastructure

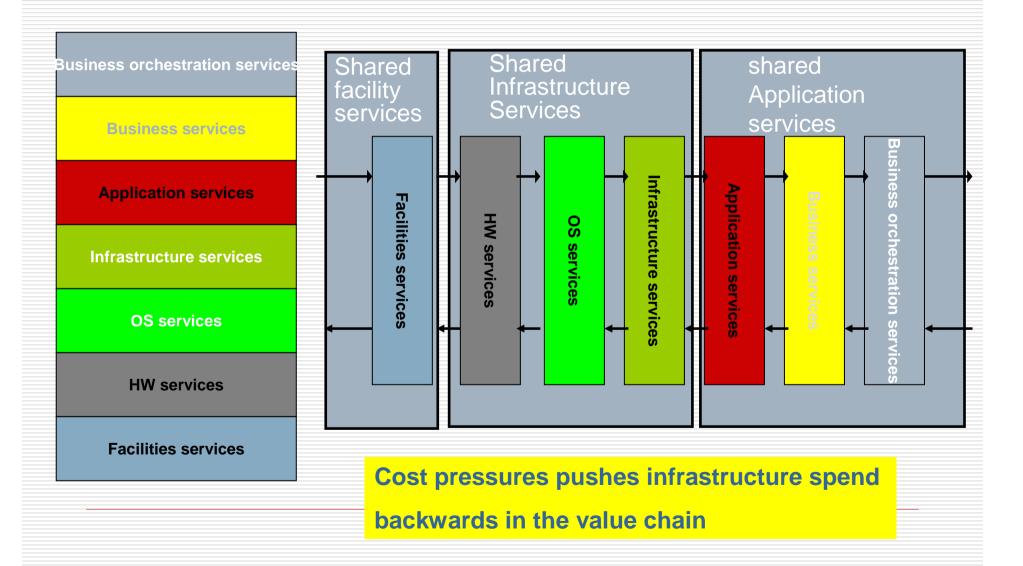
Shared Service Decision Points



The consolidation of decentralized organizations in to a Shared Service Center



Value chain of IT services



Shared Service Implications

- Service oriented
 - Dynamic provisioning
- Data center efficiency
 - cost justification
- Adaptive computing
 - Resource utilization
- Large scale computing capability
 - Computational centricity

GRID Computing for Shared Services

- □ Target technologies for eGov shared services
- Large scale computing capability in a shared service environment
- Minimizing cost of computation
- Maximizing resource utilization
- Dynamic provisioning

Future for eGov Shared-Service

- Benchmarking e-Government Expenditures
 - Defining what is an e-government expenditure Deliverables: discussion paper, meeting, database
- Cost/Benefit Analysis for Shared Services
 - Identity Management or
 - e-Procurement

Deliverables: case studies, meeting, summary analysis with business case results

■ ROI in ICT-enabled applications

Deliverables: data collection framework, case studies, meeting, report

THANK YOU