Infrastructure, costs savings and efficiency improvements, what States are looking at to achieve these…

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Agenda

- Trends in State and Local Government
- Examples of Transformed Services in other States
- Other State Initiatives/Approaches
- Examples of Cost Saving Approaches

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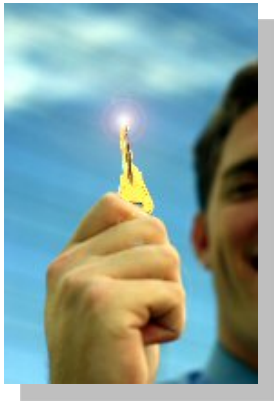
IBM's view of State and Local Government Trends

- The trend in State and Local government is to look at expanded collaboration with external service providers to increase abilities to transform IT and business organizations, to stimulate innovation and service improvements, and utilize private sector as an external change agent.



- Governments are looking at implementing transformation across their enterprise (horizontal) for infrastructure services and/or within specific agencies/departments for specific applications/programs/services (vertical).
- Transformation resulting in lower costs, higher service levels, and a more customer/citizen-centric service delivery model

What Are Government Organizations Possibly Looking For?

Potential Areas for Consideration

- Human Resources
  - Better IT skills pool access,
  - Replace legacy skills due to aging workforce
  - Relief from day-to-day IT operations issue to focus on their core business
- Best practices of government and the private sector world
  - Improved business application development
  - Better security, business continuity and Disaster recovery.
  - Lower costs that are predictable and stable
  - Higher IT service and reliability and improved customer service
  - Web enablement

What Are Government Organizations Possibly Looking For?

- Access to enterprise information, services, and resource utilization
- Enhanced business processes and quicker IT enablement
- Contractual relationships that simplifies the procurement process

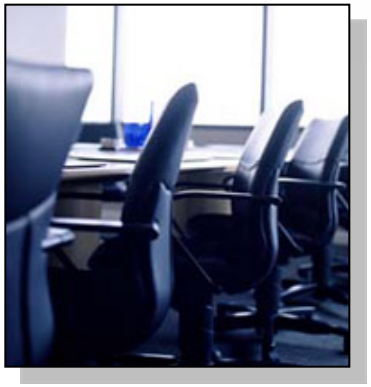
- Technology
  - Refresh upgrading of existing H/W and S/W (pc's, laptops, servers, networks)
  - Flexibility, IT optimization and better value for IT investment
  - Elimination or reduction of capital outlays
  - Consolidation, standardization, and automation
  - Replace "ancient" legacy systems by technology standards

Focus Areas

- 3 focus areas to help government entities address the challenges to implement transformation and innovation:
  - Enhance organization's capabilities and business models
  - Increase the depth and scope of collaboration
  - Integrate business and technology more cohesively
- By designing and enabling innovation approaches in these areas, government entities can achieve higher levels of collaboration and customer focus to deliver higher quality services and increase customer satisfaction

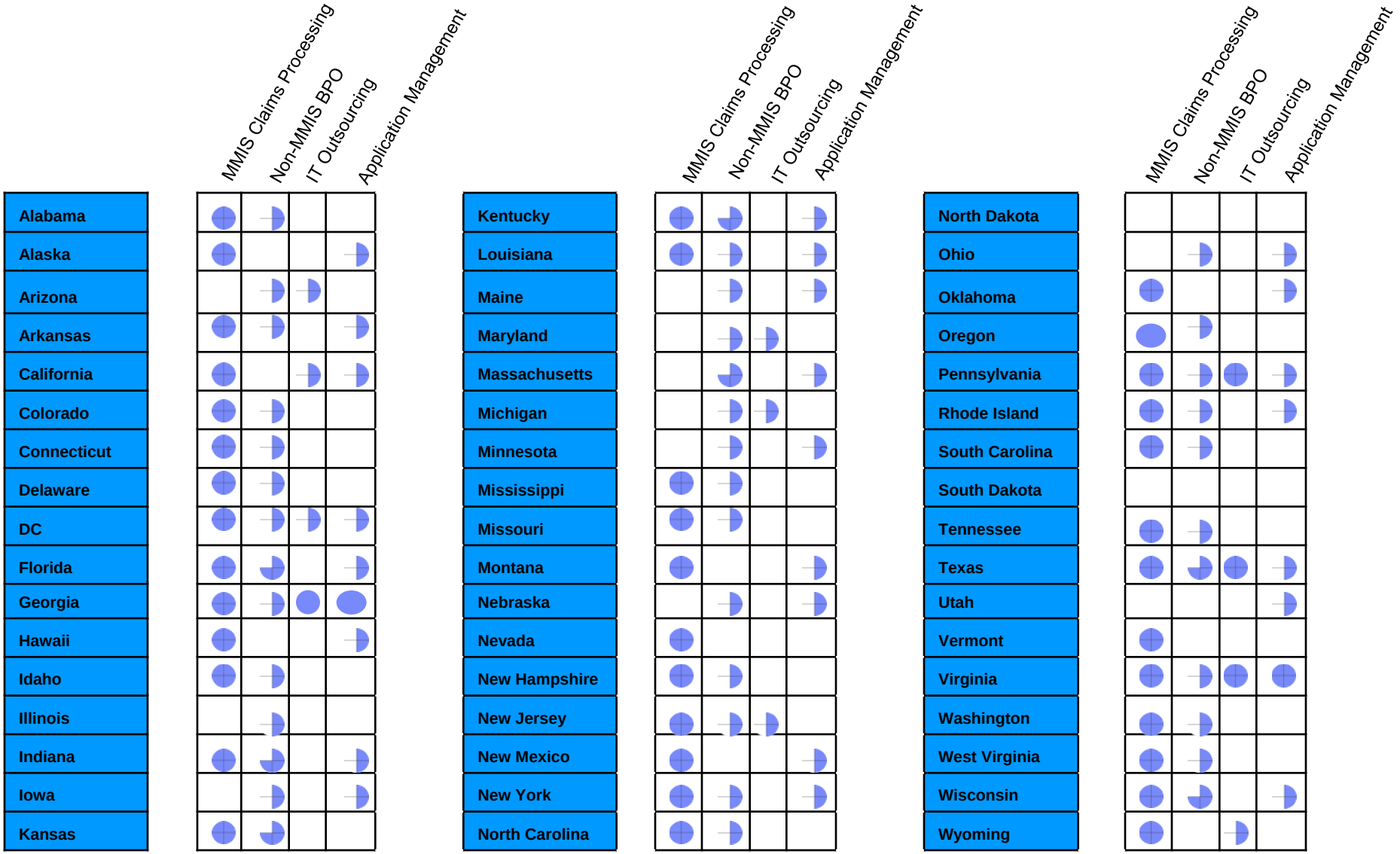
Transformation and Innovation

- Internal and external collaboration among government groups, citizens, stake holders, and service providers to integrate business and technology to improve performance and effectiveness and drive future innovation
- An increased focus on improving operations and increase capabilities



Which States are Utilizing Transformation Services?

(data compiled by IBM 4/15/09)



Criteria Utilized

- **Full ball –** full scope managed, or more than 3 instances of managed.
- **¾ ball –** 3 instances of managed identified.
- **½ ball –** 1 or 2 instances of managed identified.

Key to Terms

- **MMIS Claims Processing –** Medicaid Management Information System Claims Processing
- **Non- MMIS BPO –** Non Medicaid Management Information System Business Process Outsourcing. Examples are such projects as Child Welfare Services.
- **IT Outsourcing –** Infrastructure outsourcing means outsourcing Data Centers and hardware such as Mainframes, servers, and storage. This can also include network, and Help Desk/Desk top services.
- **Application Management –** Management of applications such as common ones that are used across agencies like Enterprise Resource Planning applications (ERPs).

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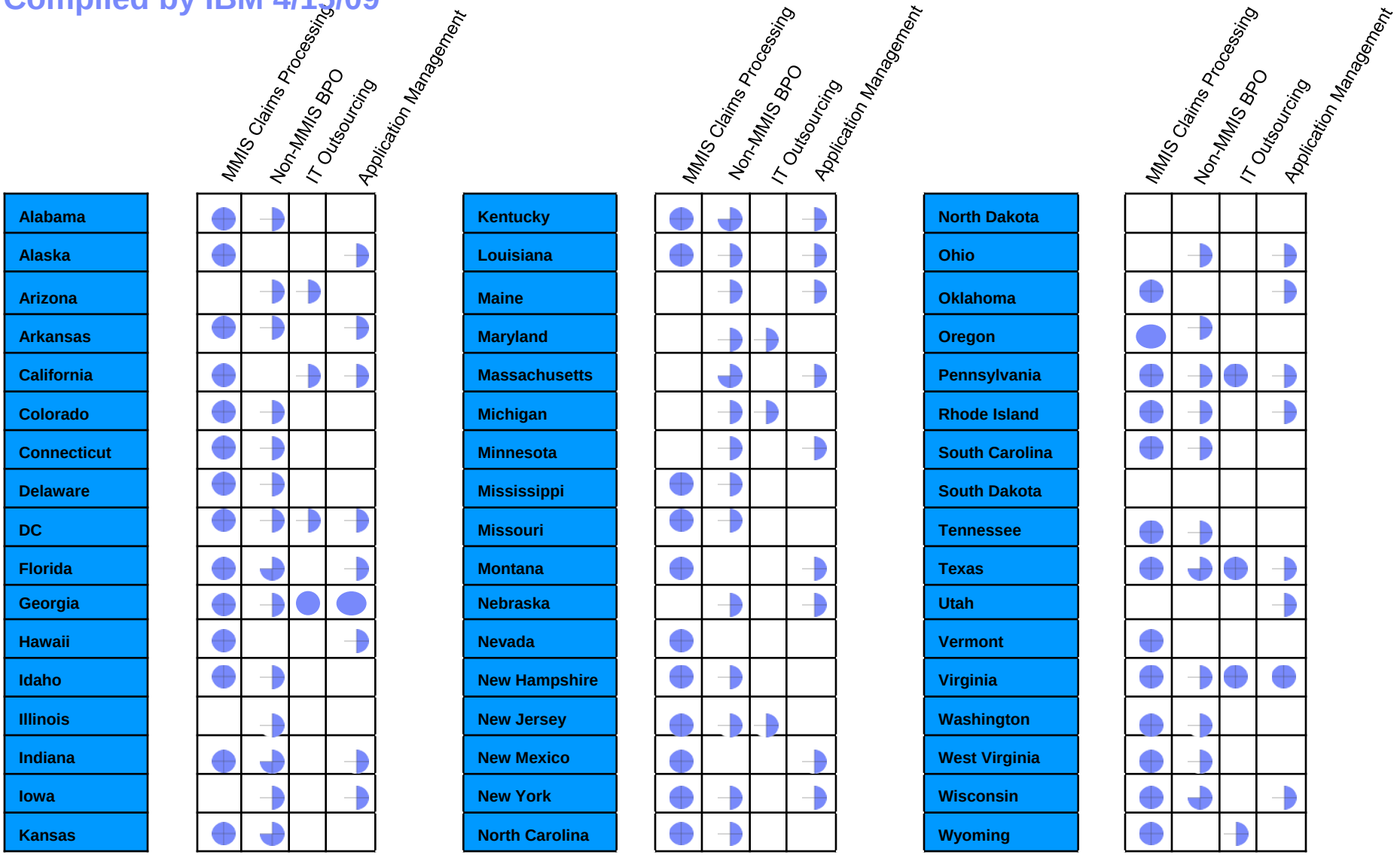


State	Length/Contract Value	Project	Estimated Savings	Benefits	Supplier
Texas	11/2006 7+ years $863M	▪Computer Operations, Remote Servers & Disaster Recovery ▪Print/Mail ▪Facility and Environmental support ▪Completed $18M build-out of Austin Data Center and $1.5M upgrade to State San Angelo Data Center ▪Consolidated Texas State Library and Archives Commission	$159 Million	▪Consolidate 31 data centers into 2; 27 agencies included ▪ Enhance infrastructure and refresh technology ▪Improve Service to Agencies ▪Enhanced and consistent Disaster Recovery Process across State ▪Transitioned 335 Texas employees to IBM/Unisys	IBM/ Unisys
Virginia	11/2005 10 year $2 Billion	▪Data Center Infrastructure; ▪Disaster Recovery; ▪Help Desk ▪End User Support ▪Network Infrastructure	$300 Million	▪Agencies –lower reoccurring costs, Innovation, Security ▪Security, Better Services, ▪Economic Development and new jobs ▪State Employees – better training, attractive benefits, career with tech firm	Northrop Grumman
Georgia	11/2008 8year $873M	▪Data Center Consolidation ▪Infrastructure services ▪Disaster Recovery ▪Upgrade Technology	$180 Million	▪Data Center Consolidation including 11 agencies ▪Transform the state's use of information technology and address the significant risks that currently threaten critical operations and services ▪Transition 291 employees to IBM	IBM
Pennsylvania	8/1999 0riginal 5 year - $515M 8/2002 ext. - $254M 6/2008 ext. - $404M for 6.5 yrs	▪Consolidate 20 data centers into one State of the Art Centralized data center ▪Management and Data Center Operational Support ▪Disaster Recovery	$240 Million	▪Data Center Consolidation ▪24 x 7 Services ▪Includes 17 agencies ▪Server consolidation & virtualization ▪Technology refresh ▪Transitioned state employees	Unisys/ IBM

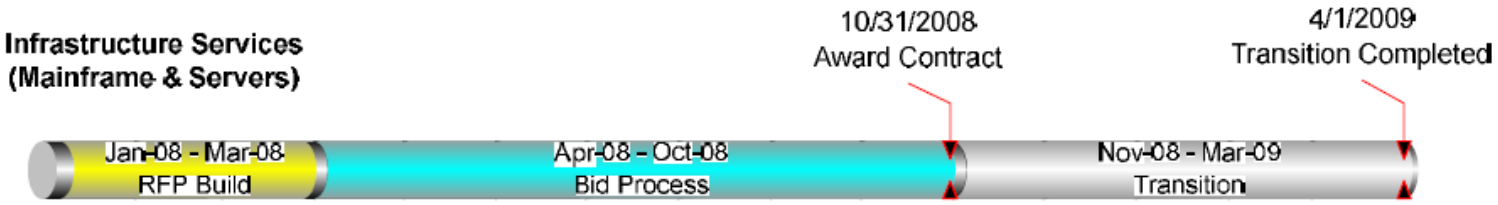
Texas Data Center

Leverages the buying power of the state to modernize the technology infrastructure, enhance information security and disaster recovery capabilities, and provide flexibility to meet changing business requirements.

	Size and Scope	Duration	Dedication to Success	Relationship Complexity	Personnel Transfer
California Child Welfare Services	✓	✓	✓	✓	
American Express	✓	✓	✓	✓	✓
State of Pennsylvania	✓	✓	✓	✓	
Georgia Health Partnership Portal		✓	✓	✓	
City of Chicago		✓	✓	✓	✓
California Child Support Enforcement	✓	✓	✓	✓	

- Size and Scope
  - $863M
- Duration – Signed November, 2006
  - 7 Years
- Estimated Savings
  - $25 M in 2008/2009
  - $159 M over contract period

Georgia Consolidation and Transformation Timelines



Impetus to Consolidation and Transformation

Governor Perdue directed the Georgia Technology Authority to transform state government's IT operations as the next step in Governor Perdue's best managed state strategy

Governor Perdue directed the GTA and 11 state agencies to participate

State of GA is predicting a $180M savings compared to the existing IT spend across the agencies affected by the change, with no need for additional funding

Advancing Georgia's IT enterprise by:

Consolidating the IT infrastructure

Securing the state's data

Providing a stable operating environment

Performing as a well governed operation

Replacing aging infrastructure

Providing robust disaster recovery

Utilization of broad industry standards

California Child Welfare Services

Partnership with California Department of Social Services to provide application and infrastructure services to support statewide Child Welfare services function.

	Size and Scope	Duration	Dedication to Success	Relationship Complexity	Personnel Transfer
California Child Welfare Services	✓	✓	✓	✓	
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- Size and Scope
  - $700M
  - All application development, deployment and maintenance, and infrastructure operations and delivery including mainframe/server, desktop, network, and help desk
- Duration
  - 14 years
- Relationship complexity
  - Services cut across 58 counties with originally disparate business processes and requirements

Commonwealth of Pennsylvania

Complex ERP implementation and management for a single technology organization representing 53 agencies.

	Size and Scope	Duration	Dedication to Success	Relationship Complexity	Personnel Transfer
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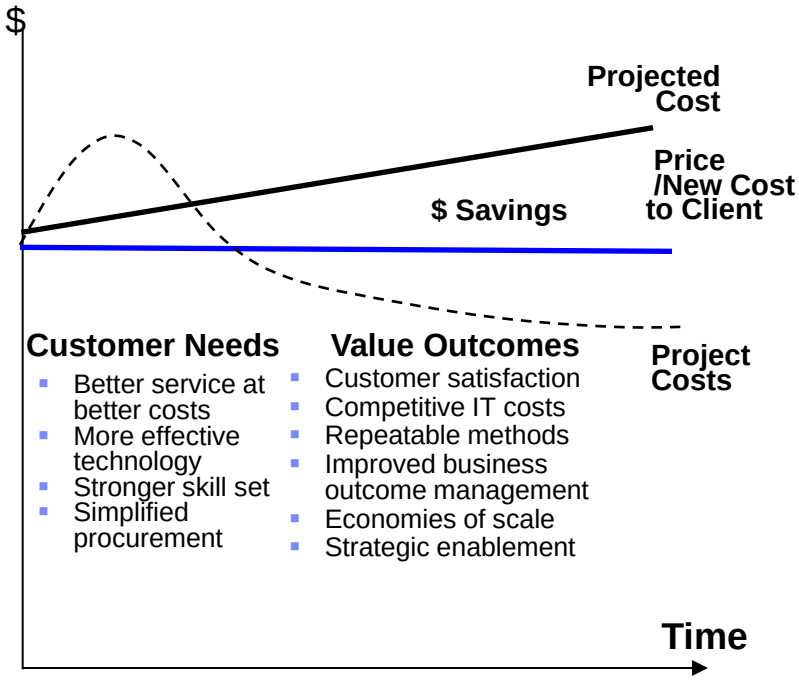
City of Chicago		✓	✓	✓	✓
California Child Support Enforcement	✓	✓	✓	✓	

- Size and Scope
  - $200M
  - ERP implementation and management
- Duration
  - 5 Years
  - Optimized IT environment, reducing infrastructure cost
- Relationship complexity
  - Implementation includes 53 agencies under a single technology organization

What does managed services mean?

Managed Services deploys an integrated set of tools, best practices and proven processes, enabling clients to leverage economies of scale, obtain quality service levels at predictable costs, and increase focus on core capabilities

How Managed Services Work:



Delivering business value

Help desk	Improved efficiency and customer satisfaction from centralized, standardized support service across the Enterprise
Desk side Support	Improved productivity due to common, standardized support service across the enterprise
Asset management	Improved cost control due to full accounting of all assets with continuous updates.
Data center	Reduced cost and complexity through footprint consolidation and centralized, standardized management across client enterprise
Network services	Can provide solid network services for voice or data in partnership with leading telecommunication vendors.
Human resources	Best practices-based management of human resources, including fair and equitable treatment of all employees accompanied by far-reaching IT career Opportunities at the biggest IT company in the world.
Disaster Recovery	Reduced risk and liability due to business continuity provisions in the event of a disaster.

Current State Initiatives/Approaches

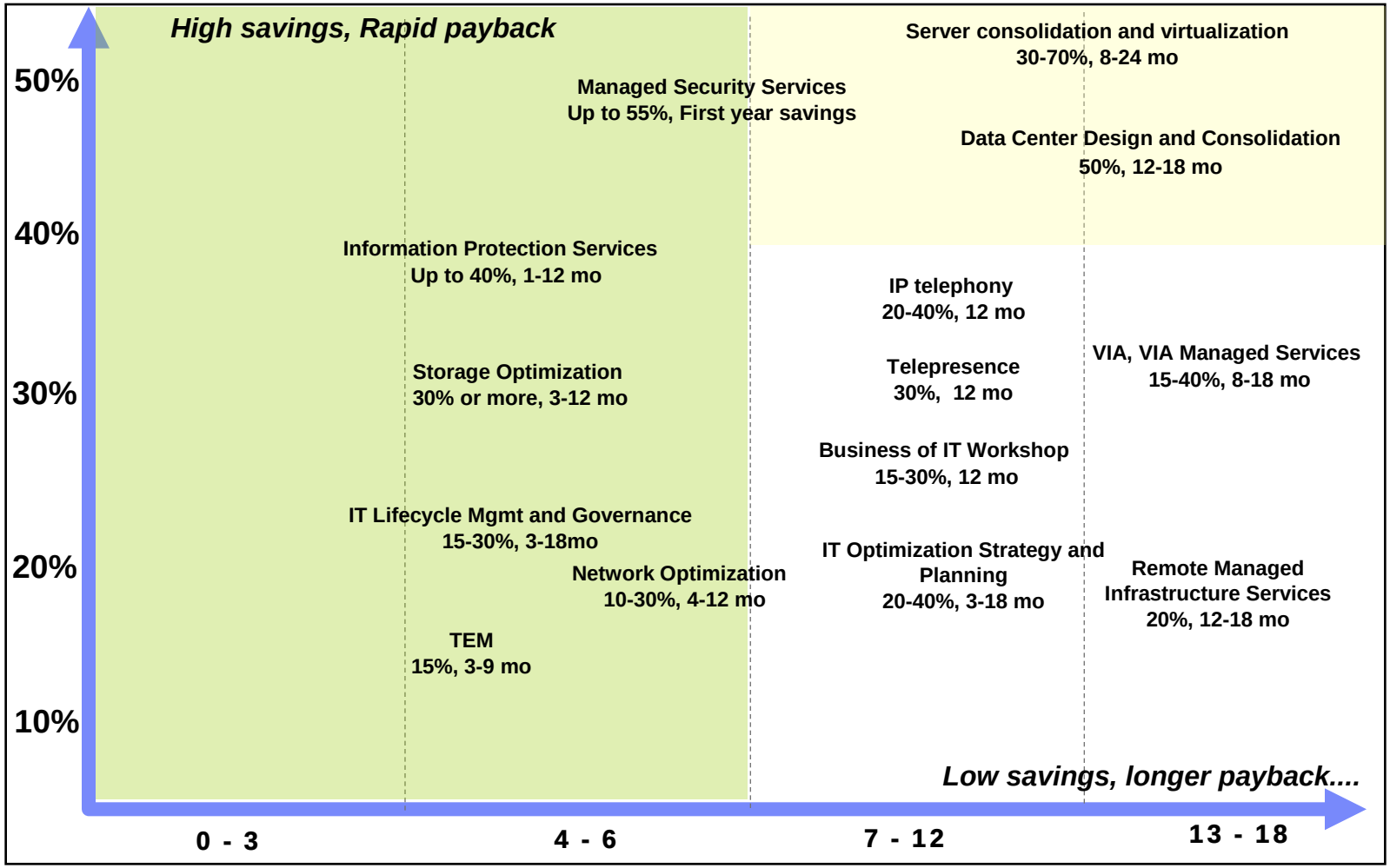
- State of Fla.- House Bill 1892
- State of Colorado – Senate Bill 08-155
- State of Minnesota - House file number 2299

Potential Cost Savings areas of Interest

- **Server Consolidation and Virtualization**
- **Security Services**
- **Data Center Design**
- **Data Storage Optimization**
- **Network Optimization**
- **An IT Optimization Strategy and Plan**

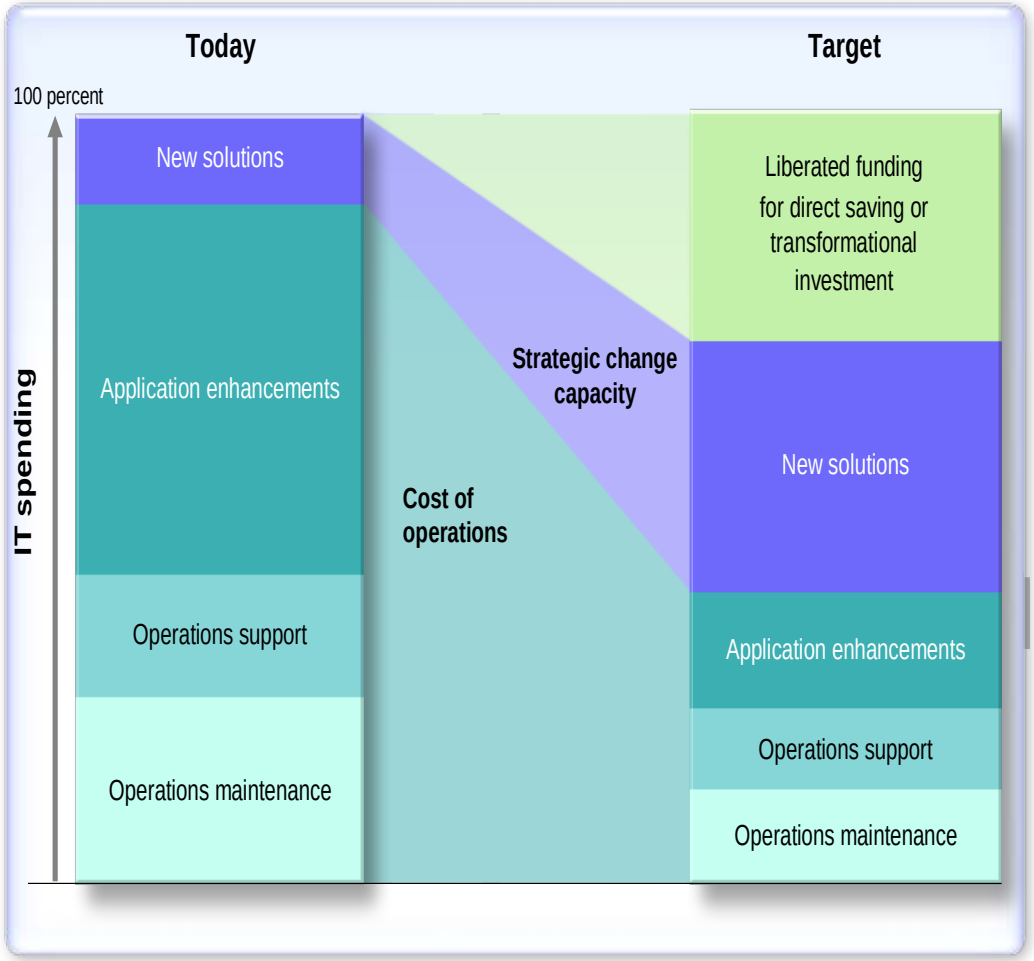
Data shows services that potentially have high estimated savings with rapid payback

Savings impact



Server Consolidation & Virtualization

Server Consolidation and Virtualization solutions may deliver a total cost of ownership savings from 30-70% with payback between 8 and 24 months



Potential Financial Benefits

- Typical total cost of ownership savings from 30 to 70%
  - Hardware costs reduced 33-70 %
  - Maintenance costs reduced up to 50 %
  - Floor space and facility costs reduced 33-50%
  - Energy costs down 40%+
- *Payback typically between 8-24 months*

Potential Business Benefits

- Fund new investments with reduced IT operational costs
- More efficient infrastructures capable of supporting greater business flexibility
- Integrating diverse systems as a result of mergers and acquisitions
- Higher utilization rates and improved performance from existing investments

Managed Security Services

MSS may provide average total cost of ownership savings up to 55% in security operations expense with savings in year one

IBM Internet Security Systems

Output from MSS TCO Calculator tool

Executive Report *You will benefit from the following projected yearly cost savings when you outsource to a trusted security provider.* 12/2/2008

	Year 1	Year 2	Year 3	Year 4
In-House Solution	$ 1,811,557	$ 1,248,853	$ 1,289,720	$ 1,332,222
MSS Solution	$ 587,944	$ 590,714	$ 593,595	$ 596,591
Savings	$ 1,223,613	$ 656,136	$ 696,125	$ 735,630
Percentage of Savings	68 %	53 %	54 %	55 %

The data used in this tool to generate the analysis is based upon IBM experience, available industry data and assumptions provided by the customer. It is intended to illustrate the potential benefits that may be achieved by the customer through the use of managed security services versus an in house security management solution. This does not mean that such benefits will be achieved. IBM provides this report on an AS IS basis. In no event will IBM be liable to the customer or any party for any direct, indirect, special or other consequential damages for any use of this tool or the reports produced by the tool.

Potential Financial Benefits

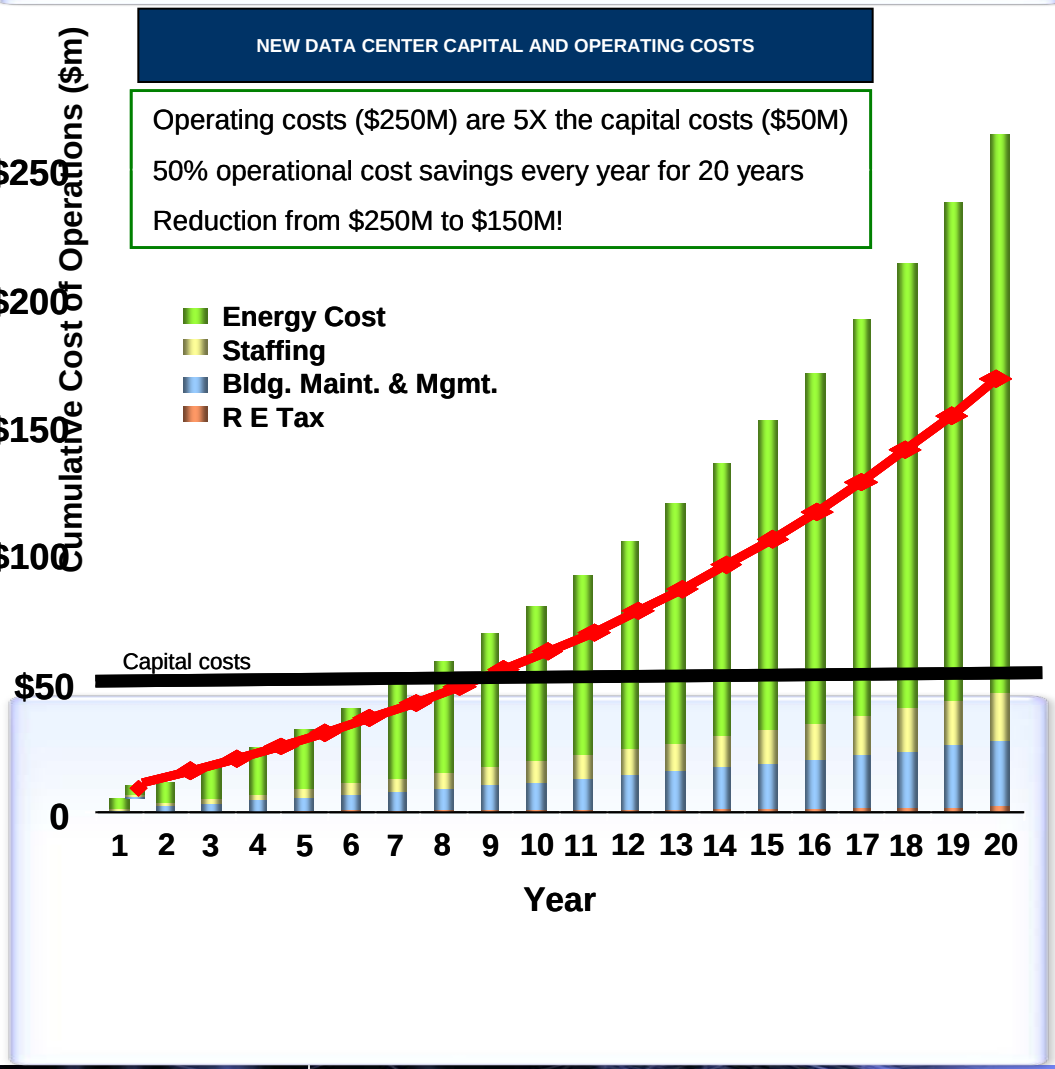
- 55% reduction in security operational costs using MSS
- Significant cost avoidance in hiring and training additional people to ensure proper network protection
- ~50% of IT security spend on labor for configuration changes, vendor management, and troubleshooting*

Potential Business Benefits

- Performance-based service level agreement (SLA) with a cash-back payment
- Designed to provide protection from known and unknown threats
- Integrated services reduces security exposures and reduces security complexity across multi-vendor environments leading to improved decision making and maximization of infrastructure investment
- Aggressive elimination of malicious traffic resulting in maximized network uptime, availability, and bandwidth
- Provides 24x7x365 expert monitoring, management, incident response and support for a broad range of security offerings through a global network of state-of-the-art, certified and secure-redundant security operations centers (SOCs)

Data Center Design

May save up to 50% operational costs from energy efficient design *(red line in chart)



Potential Financial Benefits

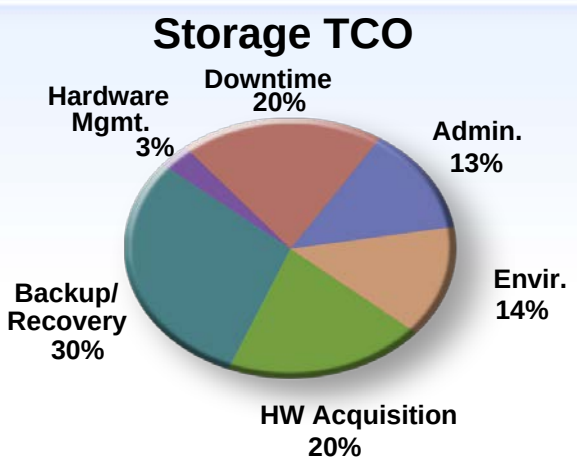
- Optimize costs around energy efficiency may save:
  - 60% of the capital costs and 75% of the operating costs are energy related.
  - Energy efficient design allows 50% operational savings (red line). Saves $150M over a 20 year life for 20,000 square foot data center.
- Building in small increments allows you to "pay as you grow" building what you need, when you need it to defer up to 40% capital costs and up to 50% operational costs until it is needed

Potential Business Benefits

Optimize the data center to reduce operational complexity, meet business continuity requirements and enable flexibility to meet dynamic business requirements

Storage Optimization and Integration

Storage Optimization and Integration may help reduce TCO 30+% by reducing complexity, improving management operations and energy consumption, through storage consolidation and virtualization. Typical payback is between 3-12 months.



Target all critical areas for cost reduction

*Source: IDC in their "Worldwide Disk Storage Systems 2008-2012 Forecast

Potential Financial Benefits

- Typical storage utilization improvements of 30+%, each 1% utilization increase from re-tiering/reclamation yields ~$500K annually
- Typically reclaim 10% to 20% of storage, results in $5M - $10M annual TCO impact for a 1,000 TB environment @ $4.50 BG/Mo
- Reduces overall migration costs between 30- 60% by lowering lease or maintenance overlaps, outage costs, staff expenses, power and floor space

:

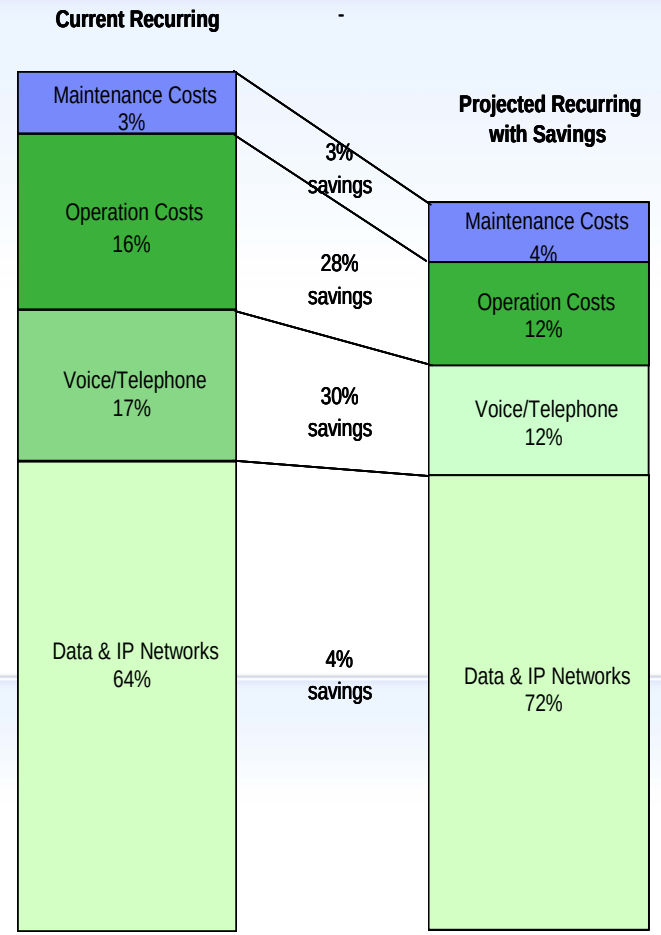
- Typical storage utilization improvements of 15% or more, yielding approx $750K - $1.5 M annual positive impact (1 PB environment)

Potential Business Benefits

- Support a dynamic infrastructure to help achieve client business objectives
- Consolidate and virtualize IT environment to simplify and more easily and efficiently manage the IT infrastructure
- Reduce costs by improving utilization of storage capacity
- Accelerate the deployment of new technology, consolidations, relocations, and infrastructure optimization projects

Network Infrastructure Optimization

Implementation of network optimization may result in a total annual recurring cost reduction of 10% to 30% with payback in 4 to 12 months



Potential Financial Benefits

May reduce total annual recurring costs by 10-30-% with payback in 4 to 12 months by:

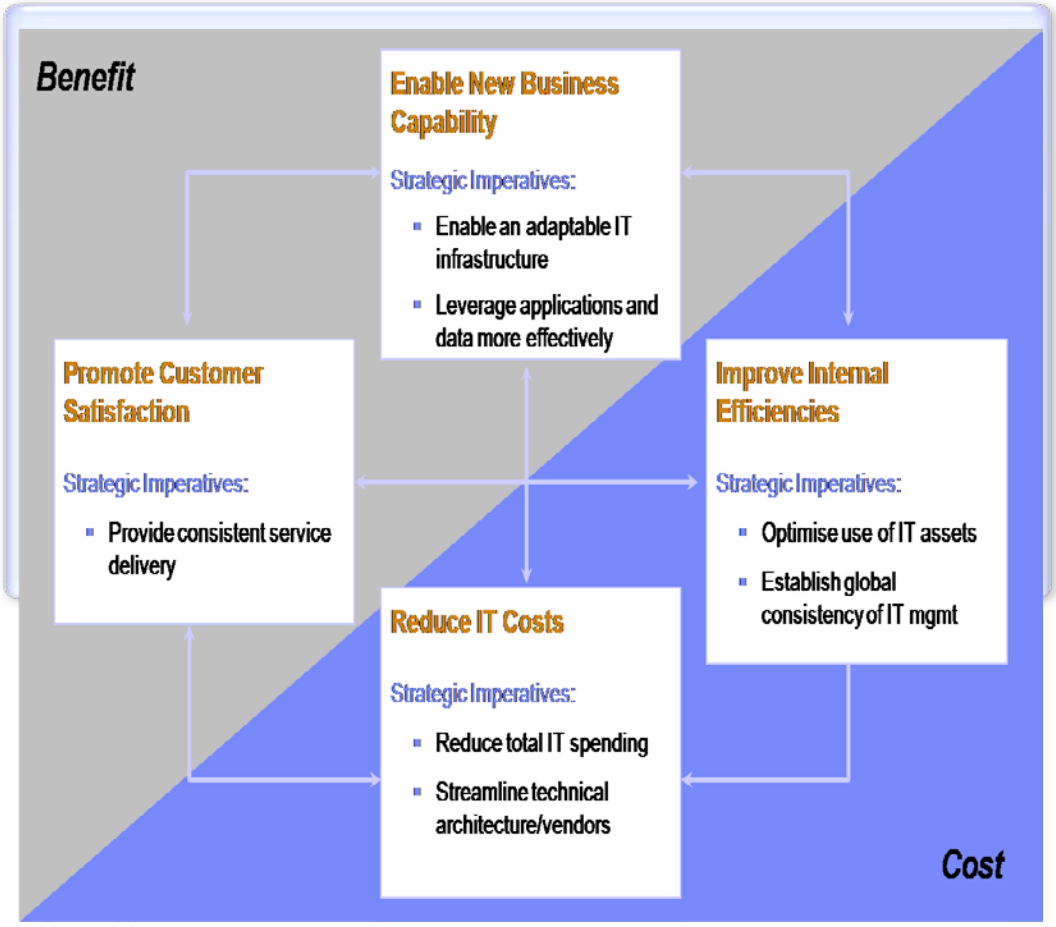
- Maintenance: optimize costs through asset management
- Operations: reduce network operation costs by consolidating Network Operating Centers and adopting a shared service model
- Voice networks: implement VoIP/IPT through network convergence to reduce long-distance calls and PBX charges
- Data/IP network: reduce Wide Area Network (WAN) costs by leveraging a shared backbone network, WAN optimization technologies

Potential Business Benefits

- Reduced annual communications-related recurring costs through leveraging economies of scale and technologies to gain savings and efficiencies
- Enhancement of employee productivity, client satisfaction and revenue streams due to network availability and performance improvements

IT Optimization Strategy & Planning

By executing against a targeted optimization plan, clients have cut costs by 20-40%



Potential Financial Payback

Clients who have executed against IT optimization strategies have experienced;

- Typical annual overall IT cost reductions of 20-40%
- Up to 75% Capital expense reduction
- Up to 35% Operating Expense reduction
- Typical optimization consulting engagements include discrete projects with 3-6, 6-12, and 12-18 month returns

Potential Business Benefits

- Set business goals and prioritize optimization opportunities
- Provides a structured blueprint for enhanced alignment of IT to business objectives
- Provides an infrastructure optimization business case
- Recommends projects to optimize asset utilization across operating systems and platforms
- Recommends a strategic framework for effectively integrating new technology and business initiatives

Summary

- Ideas on what other states are doing
- Approaches that could be considered
- Next is Programmatic approach
- Thank you

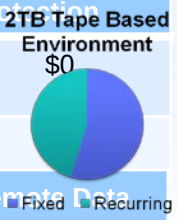
BACKUP SLIDES

- Information Protection Services
- Service Management Implementation
- Remote Managed Infrastructure Services

Information Protection Services

IPS provides an average total cost of ownership savings of up to 40% with remote data protection

Fixed Costs	Average*	Remote Data Protection
HW Costs (Tape libraries, tape drives and backup servers)	$335k	$0
SW Licensing (Backup applications & Agents)	$72k	
Recurring Costs	**Average***	**Remote Data Protection**
HW & SW Depreciation	$135k	$0
Maintenance & Support: Hardware	$82k	$0
Software & Support: Application & Agents	$14k	$0
Operational Media (new tapes to support growth and replacement	$40k	$0
Offsite Tape Vaulting (handling, transportation and vaulting fees)	$7k	$0
Backup Staffing (to support operational backups)	$12k	$0
Data Restoration Staffing (to support restore requests)	$4k	$0
Annual Cost of Floor Space, Power and Cooling	$20k	$0
Annual Fee (TCO)	$314k	$100k - $150k



Financial Benefits

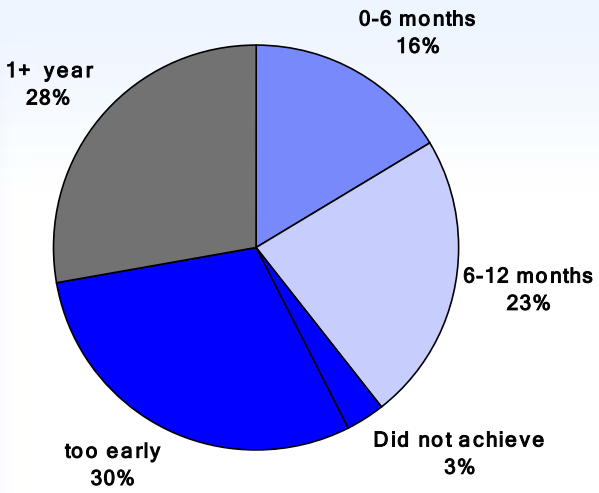
- Average savings of **up to 40% with savings in year 1**
  - **Eliminate capital costs** for complex hardware and software
  - Ease staffing pressure - **no need for additional IT resources**
  - **Scalable** to meet changing business needs
- Reduces or eliminates the potentially devastating costs of downtime after a disaster
- Enables IT departments to meet stricter recovery time objectives **improving recovery time by up to 80%**
- Enables companies to meet data retention requirements to ensure compliance for regulations: SOX, HIPAA, SEC-174A

Business Benefits

- Automatic data protection for servers and desktop/laptops
- Includes all hardware, software, expert staffing, and 24x7 monitoring & management
- Security -enhanced, bandwidth-efficient, network-based daily backups from virtually anywhere on your existing network to a “data vault” at an IBM or partner data center
- Quickly accessible file recoveries
- Secure data protection with 128-bit Advanced Encryption Standard (A E S) encryption
- Web -based portal for config management and reporting

Service Management Implementation –
IT Lifecycle Management and Governance

Clients have cut expected service management software implementation by 30-50%



Nearly 40% of organizations working with an external provider to implement service management software had an ROI of less than one year

Financial Payback

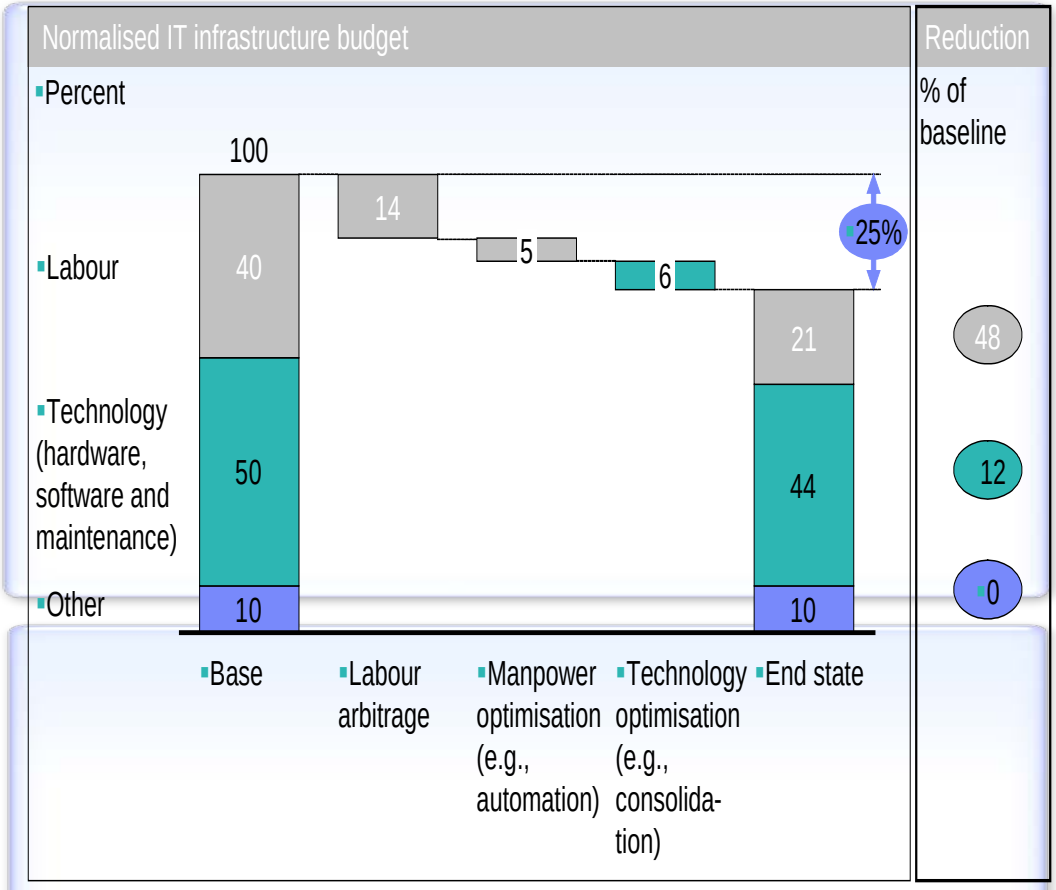
- Leverage rapid and integrated process software implementation
- Clients have experienced;
  - 50% decrease in expected implementation time
  - 30% + Reduction in service disruptions
  - Better integration of new capabilities into existing environments

Business Benefits

- Ensure new software deployments are effectively integrated into existing, heterogeneous, environments
- Ensure infrastructure investments are aligned to current and future business model requirements
- Helps establish metrics that are meaningful to the business
- Lower the cost of IT Services while maintaining or improving service quality
- Create strategy and plan that leverages current infrastructure investments for greatest business value
- Limit risk to business operations due to new software process implementation through integrated design
- Reduce risk to ongoing business operations due to infrastructure failure or limited availability

Remote Managed Infrastructure Services

RMIS enables typical cost savings of 20% by providing clients efficient, cost-effective server management through a scalable delivery model



Source: Vendor and customer interviews; McKinsey analysis

Financial Payback

- Lowers operational costs, typically by at least 20%, with minimal up-front costs
- Helps improves utilization of existing assets reducing capital required for new servers and storage
- Access to low cost global resources without the risk
- Improved server management minimizes lost revenues due to server outages
- Estimated time to achieve payback is 12-18 months

Business Benefits

- Enables you to focus on your core business and leave the IT management to certified and experienced subject matter experts
- Frees up operational budget for other IT or business investments
- Includes comprehensive monitoring and management solutions for server, storage, network and middleware to improve system availability
- Gives you access to the right combination of specialized remote competency centers and on-site capabilities