Presentation to the House Government Efficiency and Technology Committee

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1-25-2007

Agenda

- Kansas IT Governance
- Governance Deliverables
  - Strategic Information Management Plan
  - Agency Three Year IT Management and Budget Plans
  - Enterprise Architecture
  - Agency Project Plans

Kansas IT Governance

In 1998, the Legislature passed, and the Governor signed, Kansas Senate Bill #5. These laws altered the face of IT governance in the State.

- Coordinates IT Activities of all state agencies
  - Increases IT efficiencies
  - Streamlines reporting
  - Increases communication
- Facilitates discussion toward a consolidated operational structure
- Created different components to achieve these goals

KSA 75 7201-7212 et seq

1998 Senate Bill 5 Established

- Information Technology Executive Council (ITEC)
  - KSA 75-7202 – 7203
- Chief Information Technology Architect (CITA)
  - KSA 75-7204
- Chief Information Technology Officer (CITO) for each branch of government
  - KSA 75-7205 – 7208
- Joint Committee on Information Technology (JCIT)
  - KSA 75-7213
- Deliverables and Controls for IT
  - KSA 75-7209 - 7211

Information Technology Executive Council

Roles:

- Provide Policy Direction and Coordination for the State's IT resources

Information Technology Executive Council (ITEC)
Cabinet Agency Heads, Branch CITOs, City- County- Private Sector CIOs, Regents, CITA

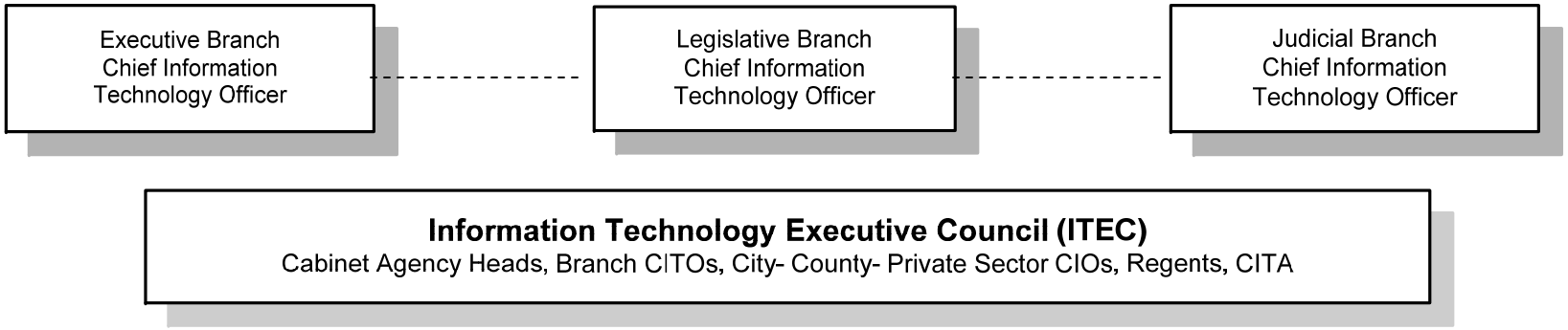
Responsibilities:

- IT Policies, Procedures, Standards, and Guidelines
- The Long-Range Enterprise Strategic Information Management Plan
- The Kansas Information Technology Architecture
- Project Management Standards

Branch Chief IT Officers

Roles:

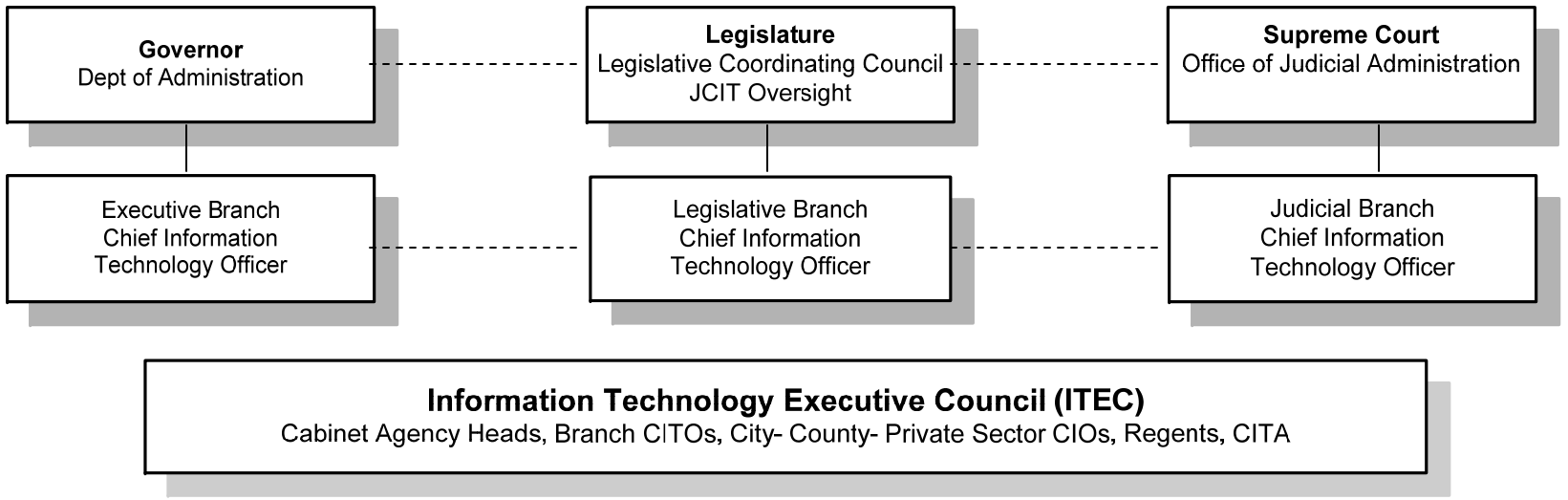
- Execute IT Policy Direction for the State



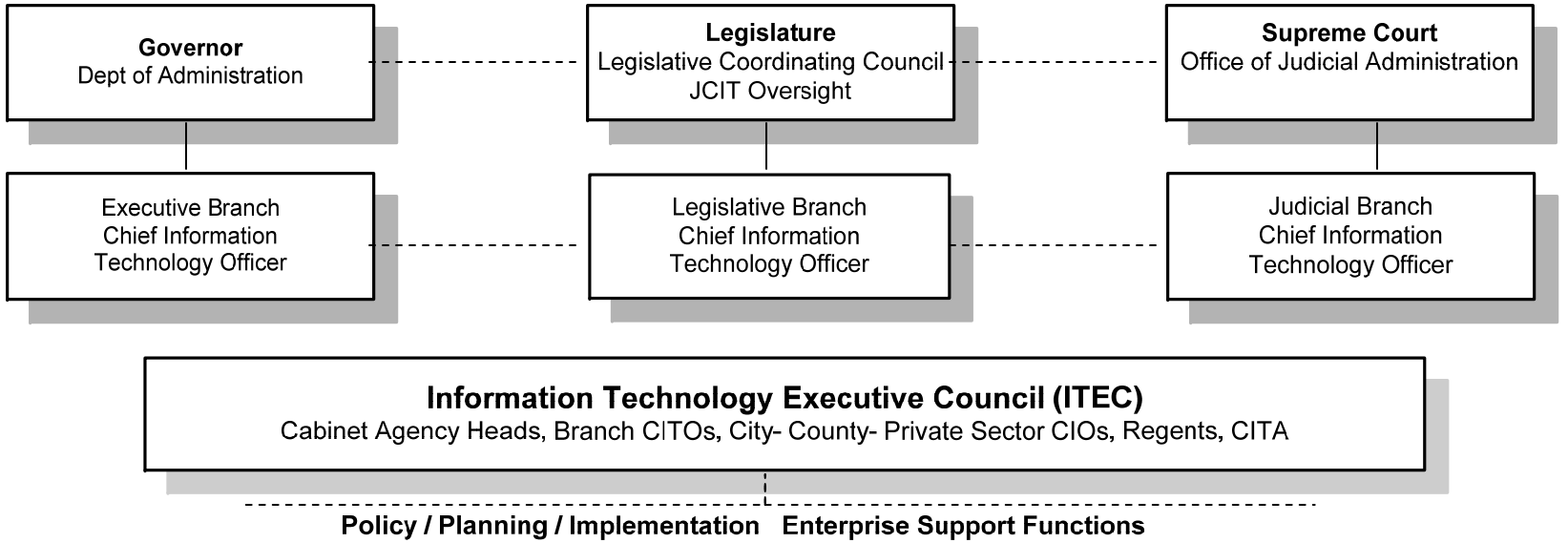
Responsibilities:

- Implement ITEC Policies
- Monitors Execution of ITEC Policies / Deliverables
- Approve and monitor Projects

CITO's Dual Relationship

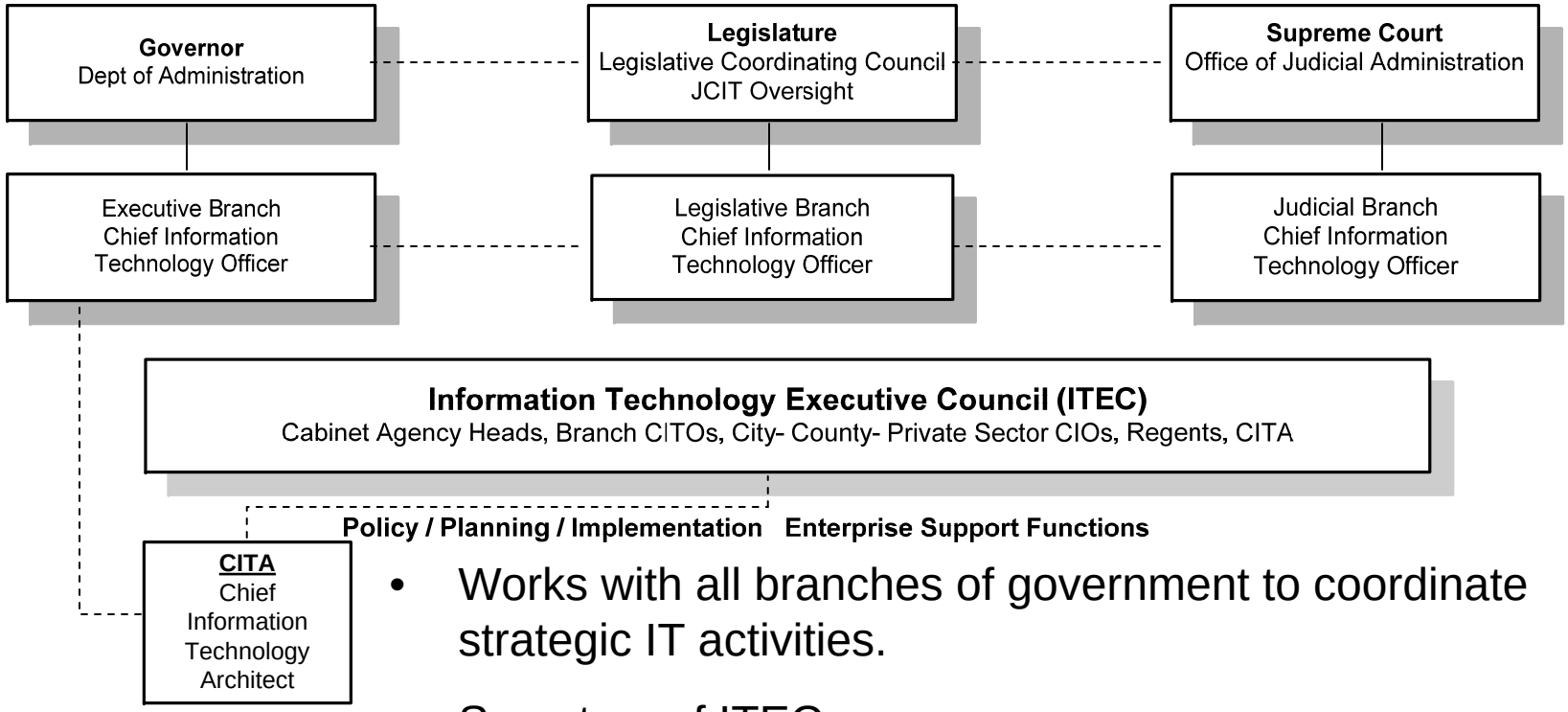


- CITO's are voting members of ITEC
- CITO's report to their corresponding branch authority
- This dual relationship enables them to look at all facets of the IT environment - Tactical, Strategic, Visionary



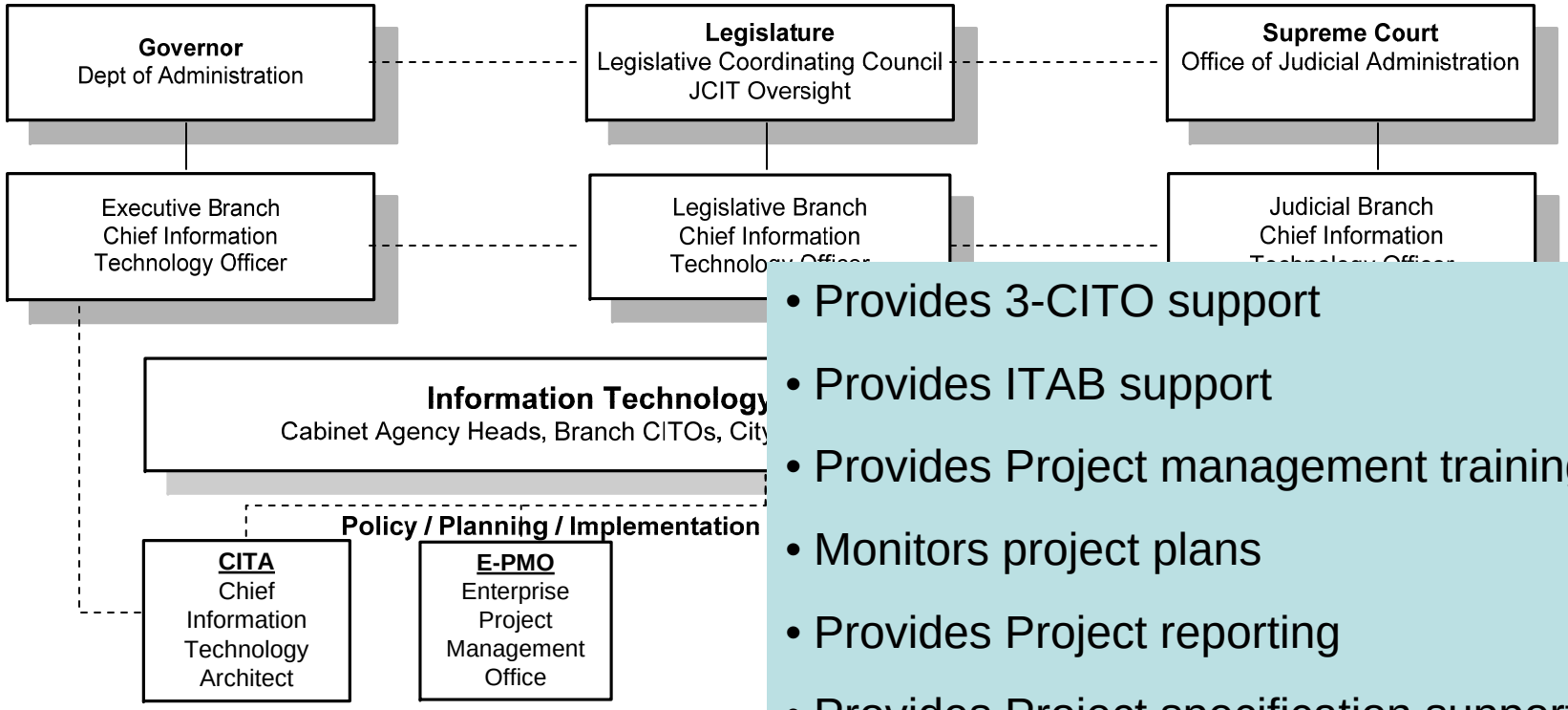
- The following units together can be looked at as the enterprise management and coordination arm of the IT Governance Model.
- They help execute the policies of ITEC and develop the deliverables mandated in Senate Bill 5 for ITEC and other groups.

Chief Information Technology Architect



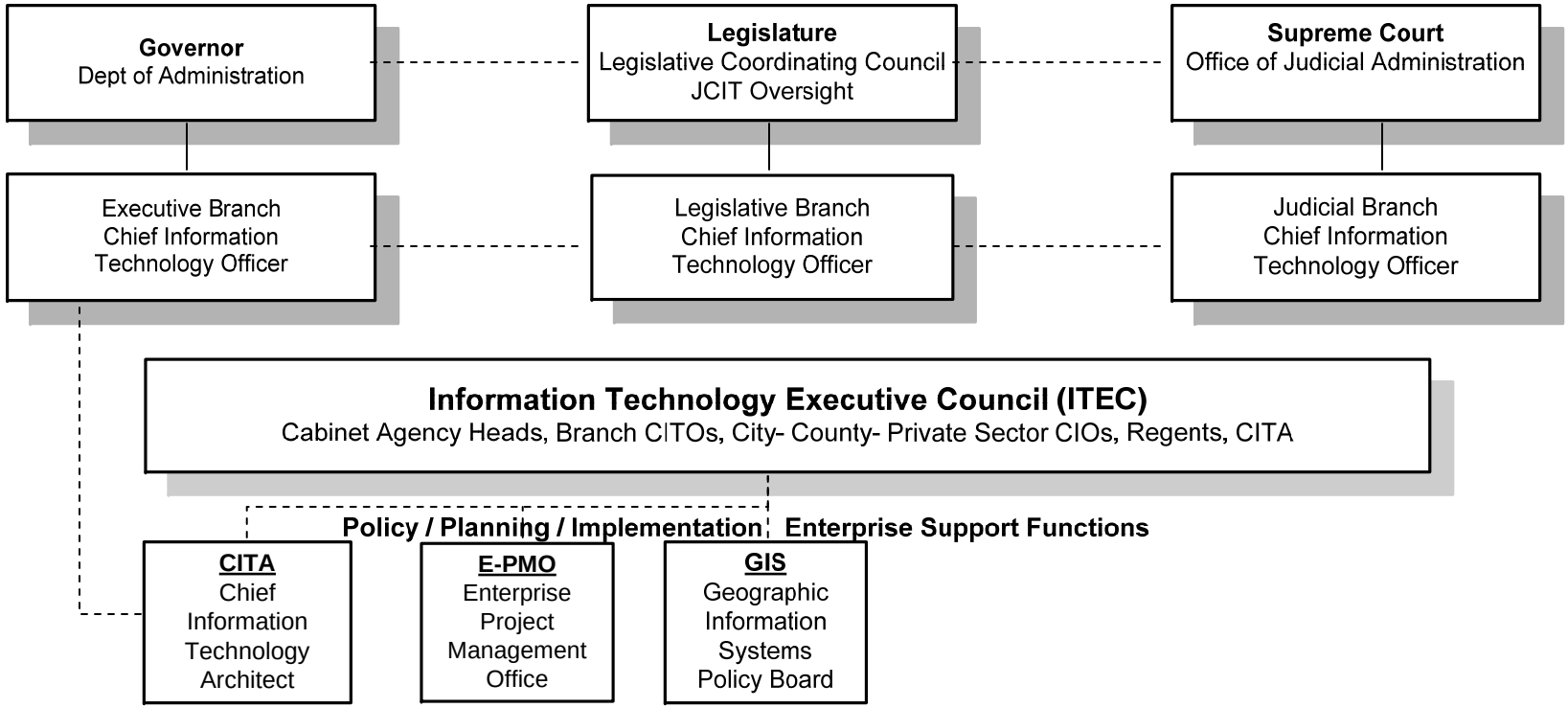
- Works with all branches of government to coordinate strategic IT activities.
- Secretary of ITEC
- Helps ITEC develop the Strategic Plan, Kansas IT Architecture, Project Management Standards, Agency 3-Year IT Management and Budget Plan

Enterprise Project Management Office



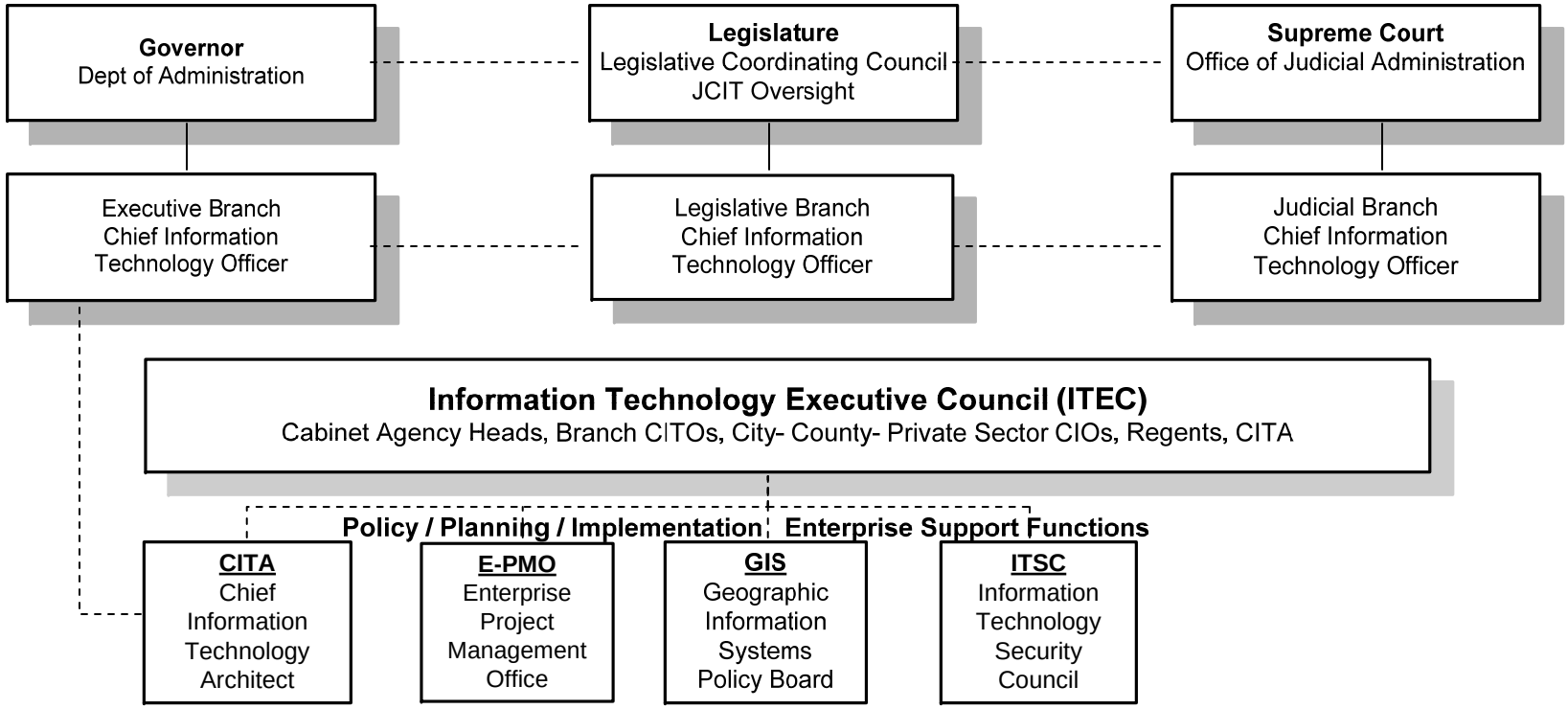
- Provides 3-CITO support
- Provides ITAB support
- Provides Project management training
- Monitors project plans
- Provides Project reporting
- Provides Project specification support

GIS Policy Board



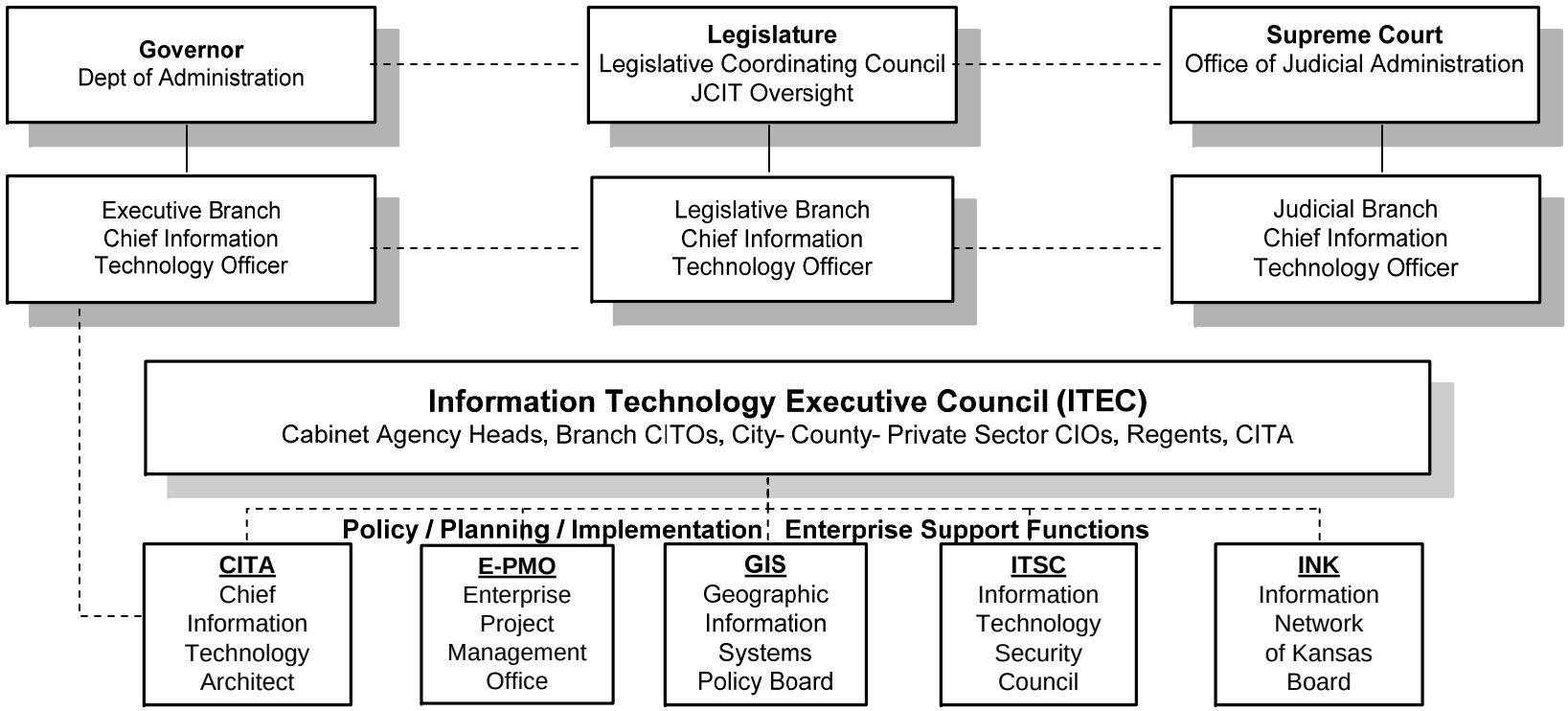
- Provides shared geospatial data, standards, and partnerships with state, federal, and local units of government
- Data Access Support Center (DASC) at the University of Kansas provides geospatial data distribution, archival, and support services for the state's GIS community

Information Technology Security Council



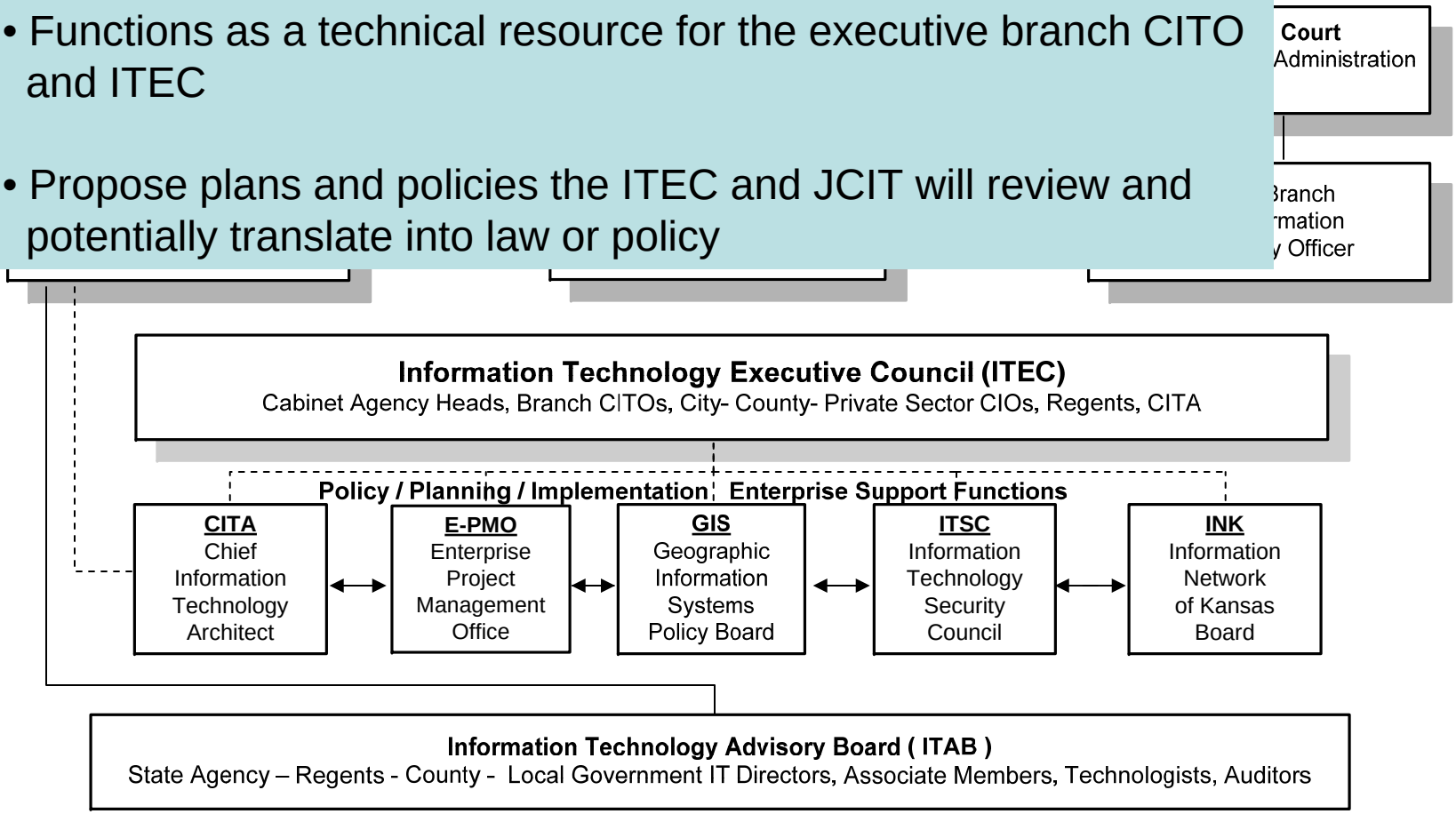
- Recommends Policies to safeguard IT assets of the state
- Chief Information Security Officer coordinates the IT security initiatives of the ITSC and coordinates statewide response to security issues that threaten application and IT infrastructure

Information Network of Kansas

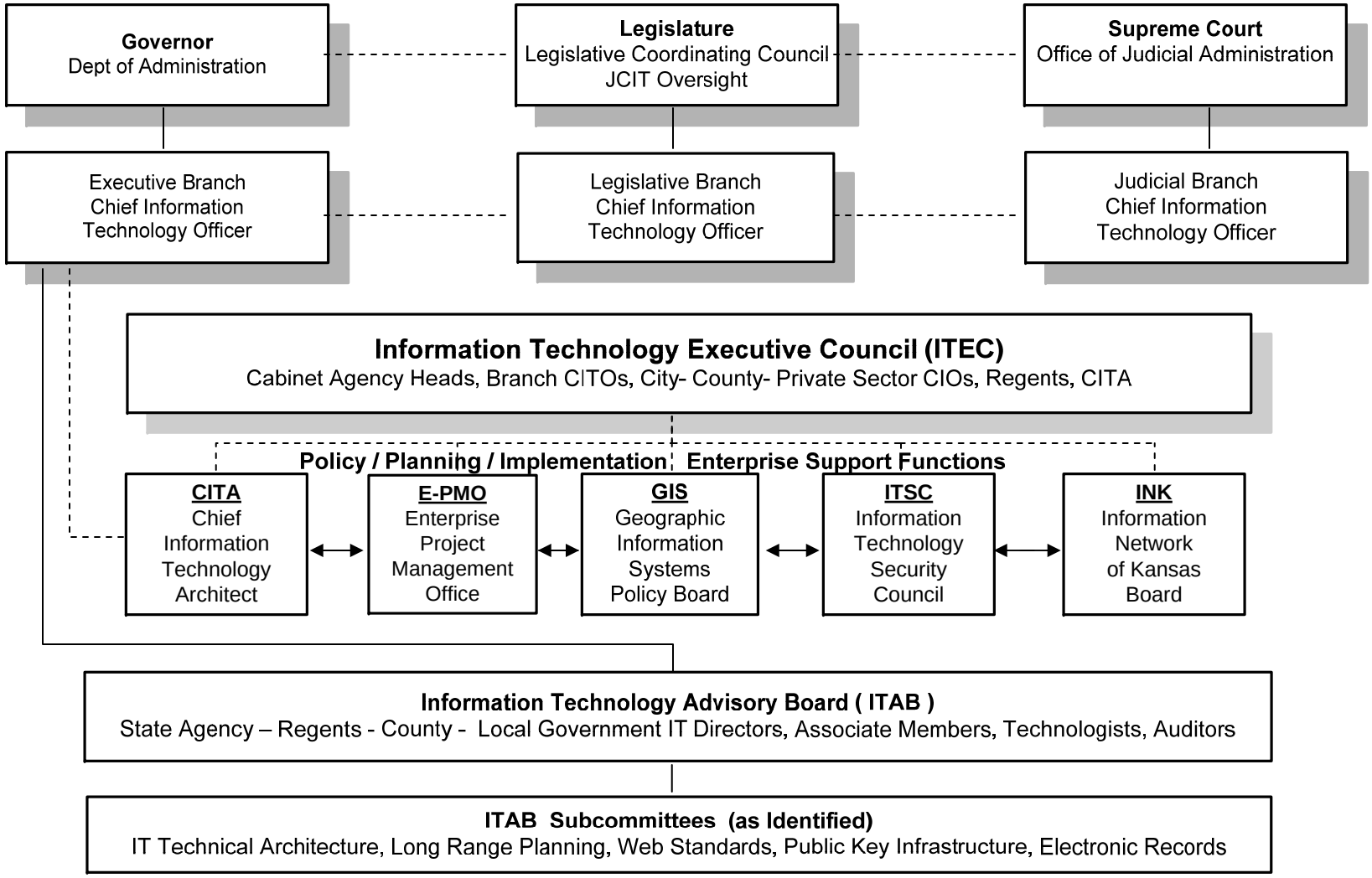


Information Technology Advisory Board

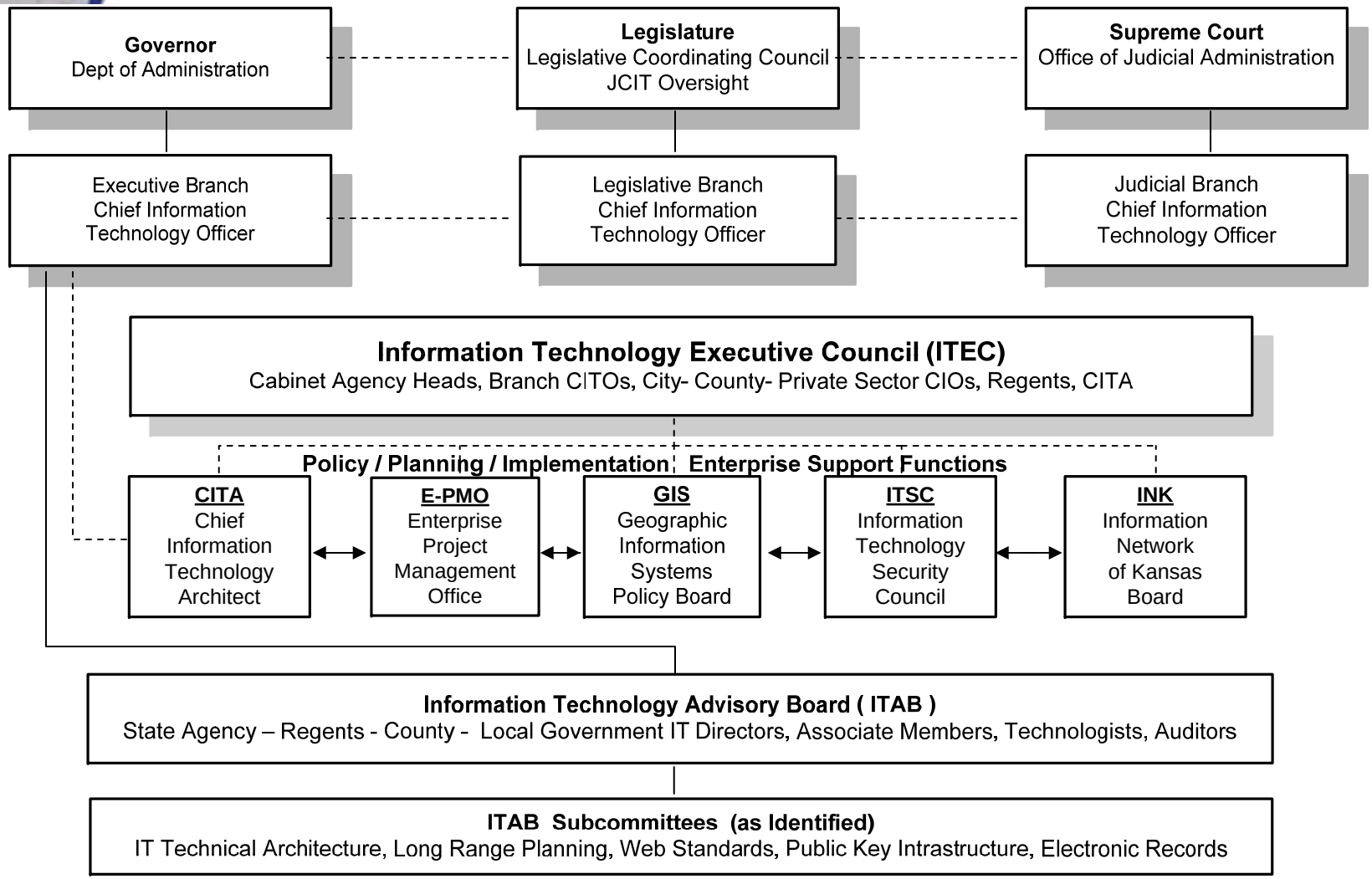
- Functions as a technical resource for the executive branch CITO and ITEC
- Propose plans and policies the ITEC and JCIT will review and potentially translate into law or policy



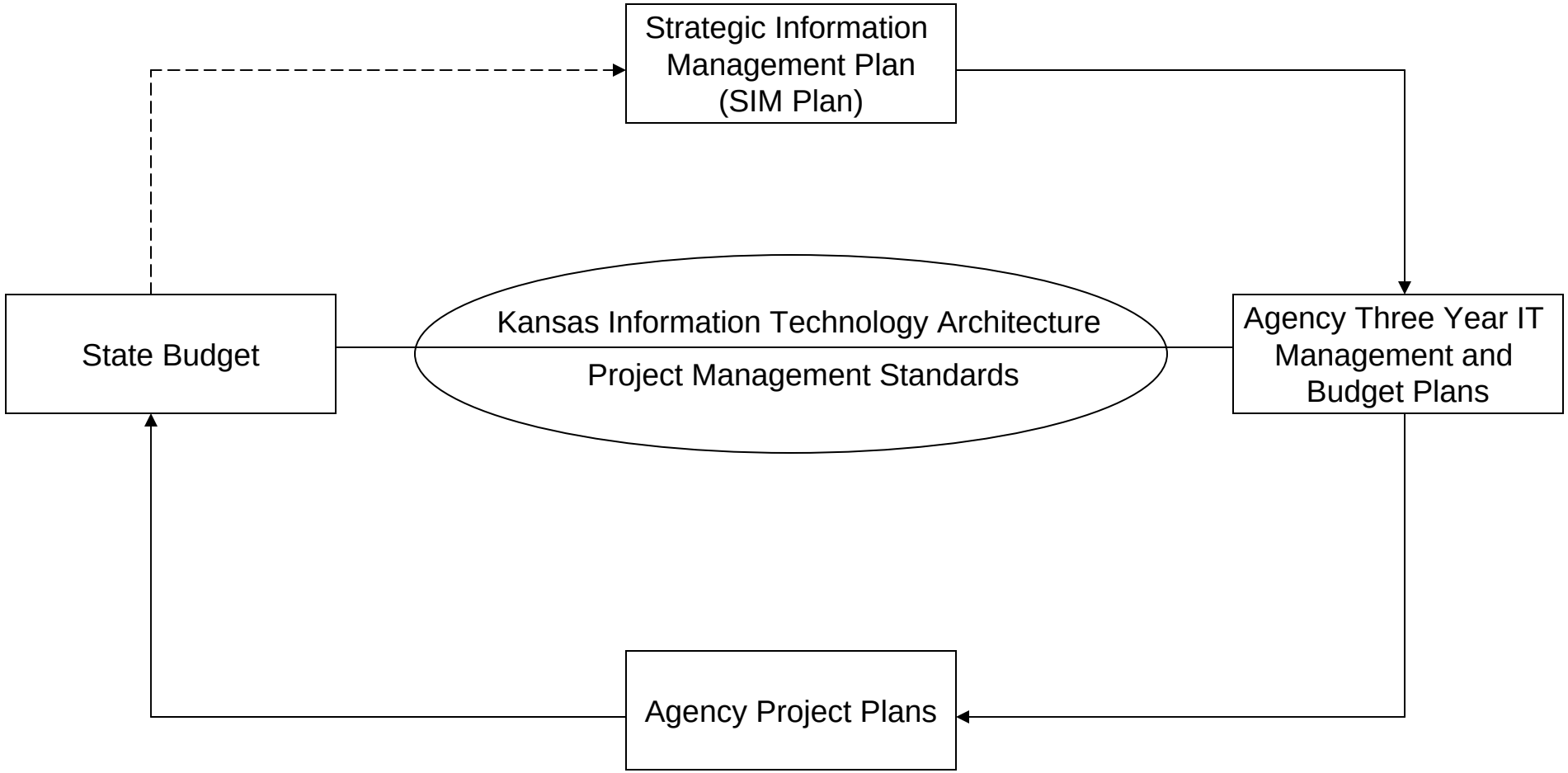
ITAB Subcommittees



Kansas IT Governance



Governance Deliverable's Relationships



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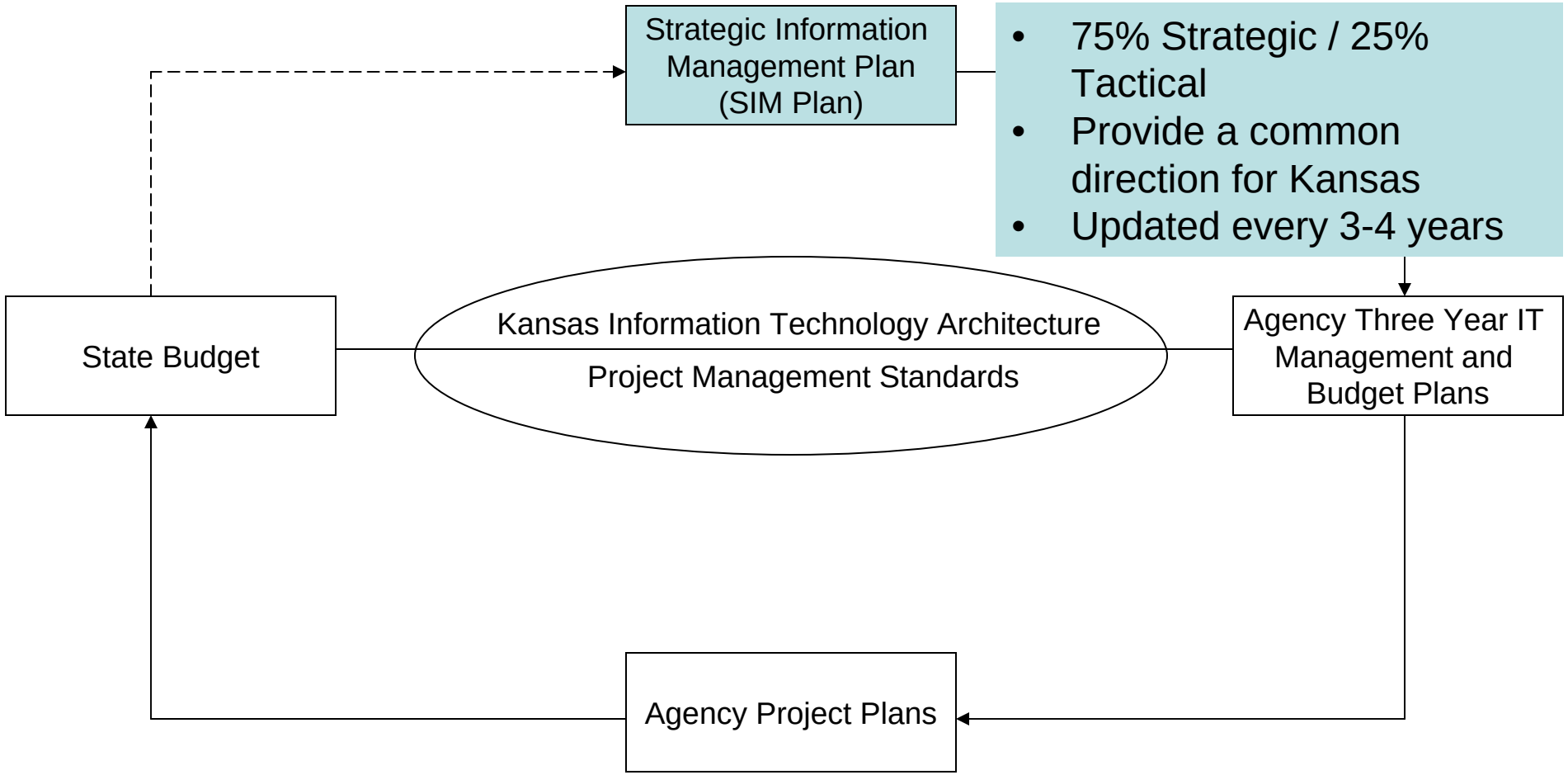
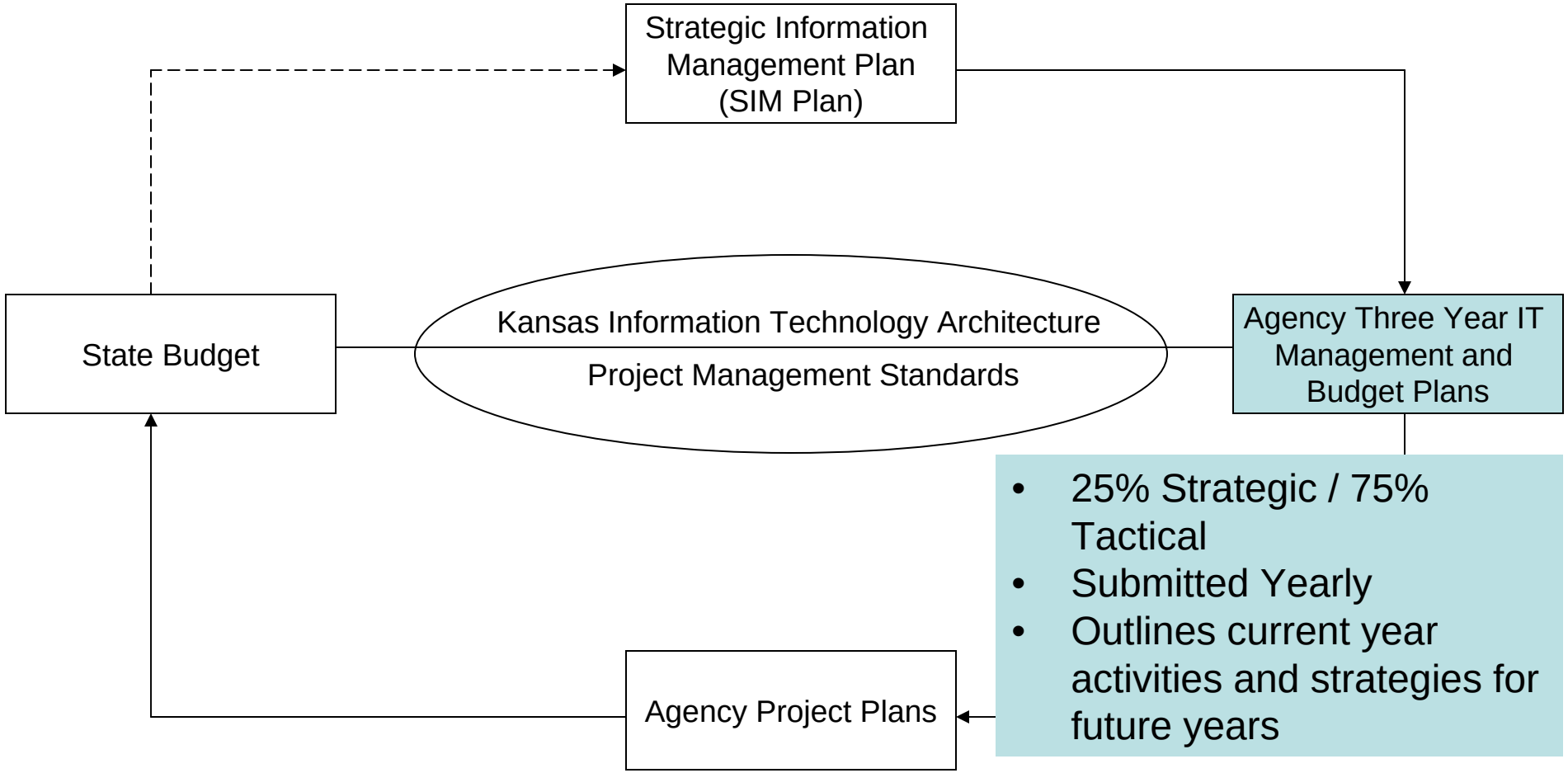
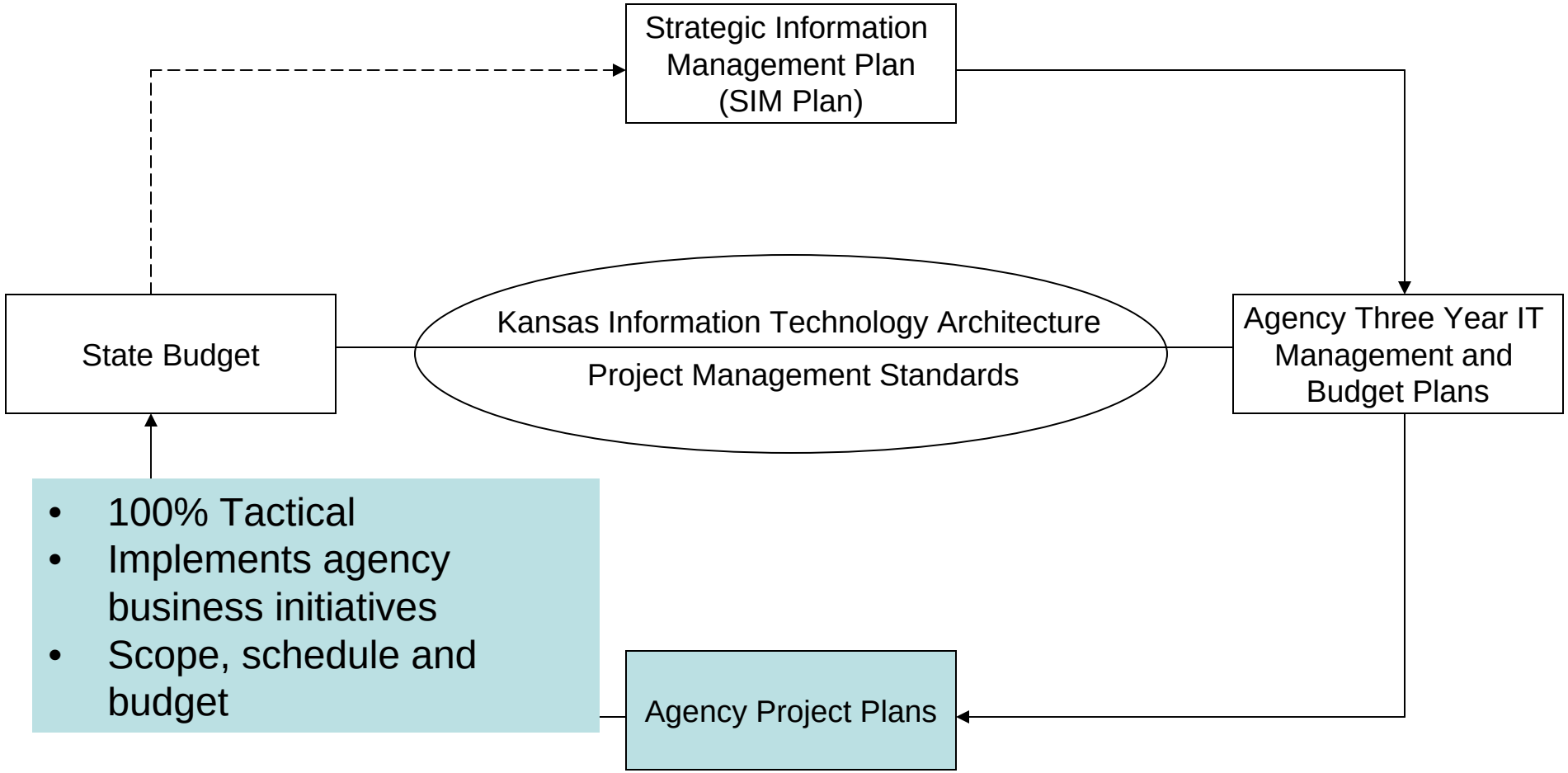


Governance Deliverable's Relationships



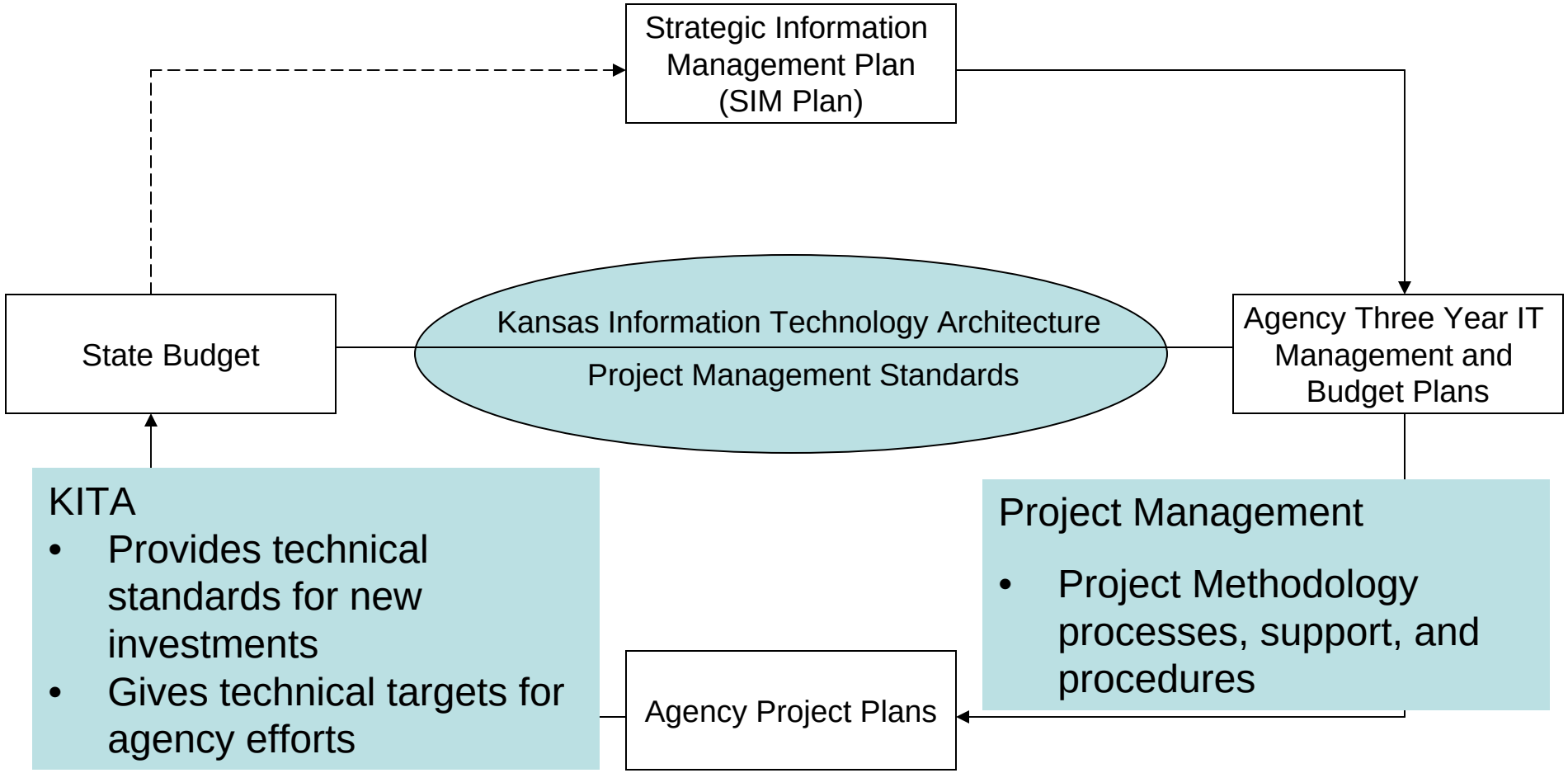
- 25% Strategic / 75% Tactical
- Submitted Yearly
- Outlines current year activities and strategies for future years

Governance Deliverable's Relationships



- 100% Tactical
- Implements agency business initiatives
- Scope, schedule and budget

Governance Deliverable's Relationships



In Summary

- Strategic Plan sets the technology direction for Kansas
- Agency 3-Year IT plans define initiatives, which relate to the Strategic Plan's direction
- Agency project plans execute agency's initiatives defined in the Agency 3-Year IT plan
- State Budget funds Agency project plans
- IT investments should conform to the Kansas Information Technical Architecture (KITA)

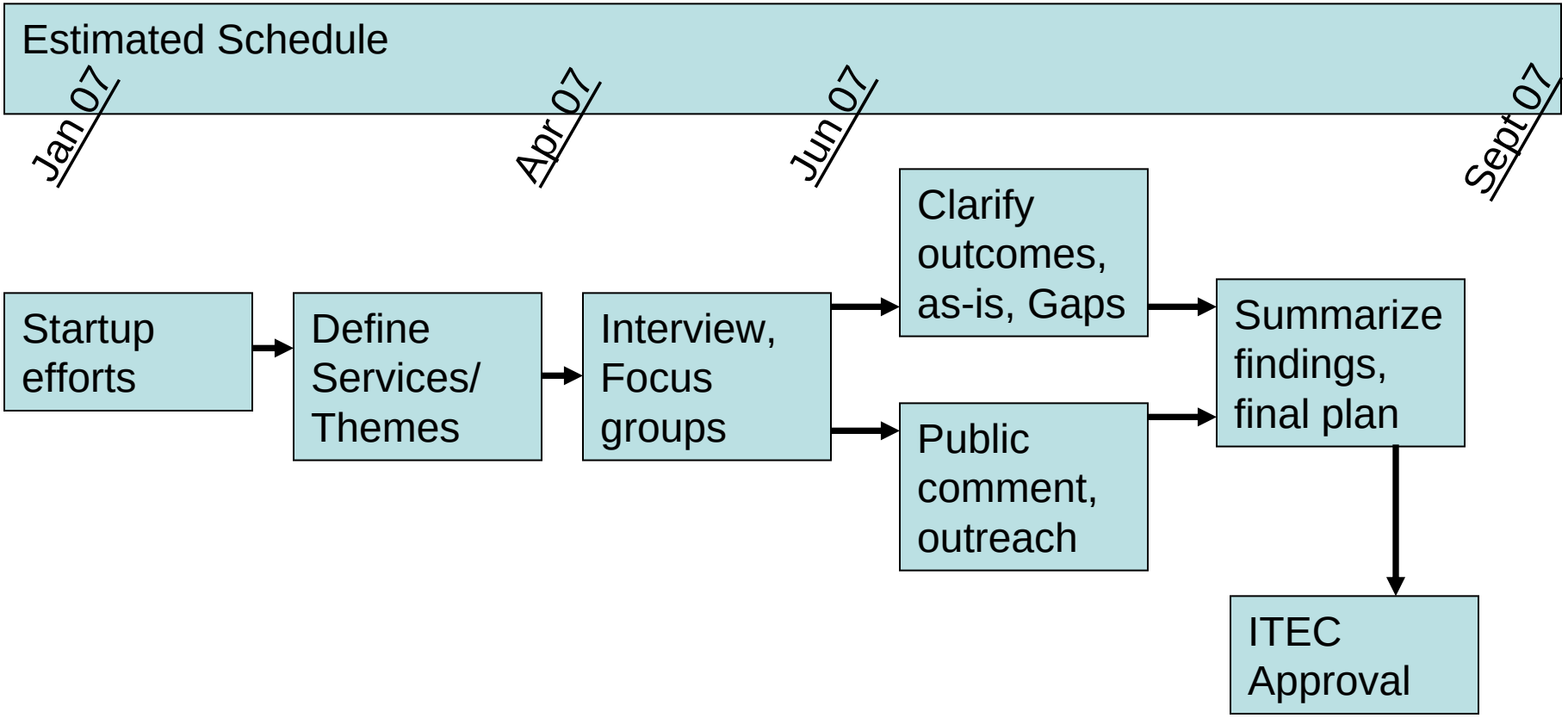
Strategic Information Management Plan (SIM Plan)

http://www.da.ks.gov/itec/SimPlan.htm

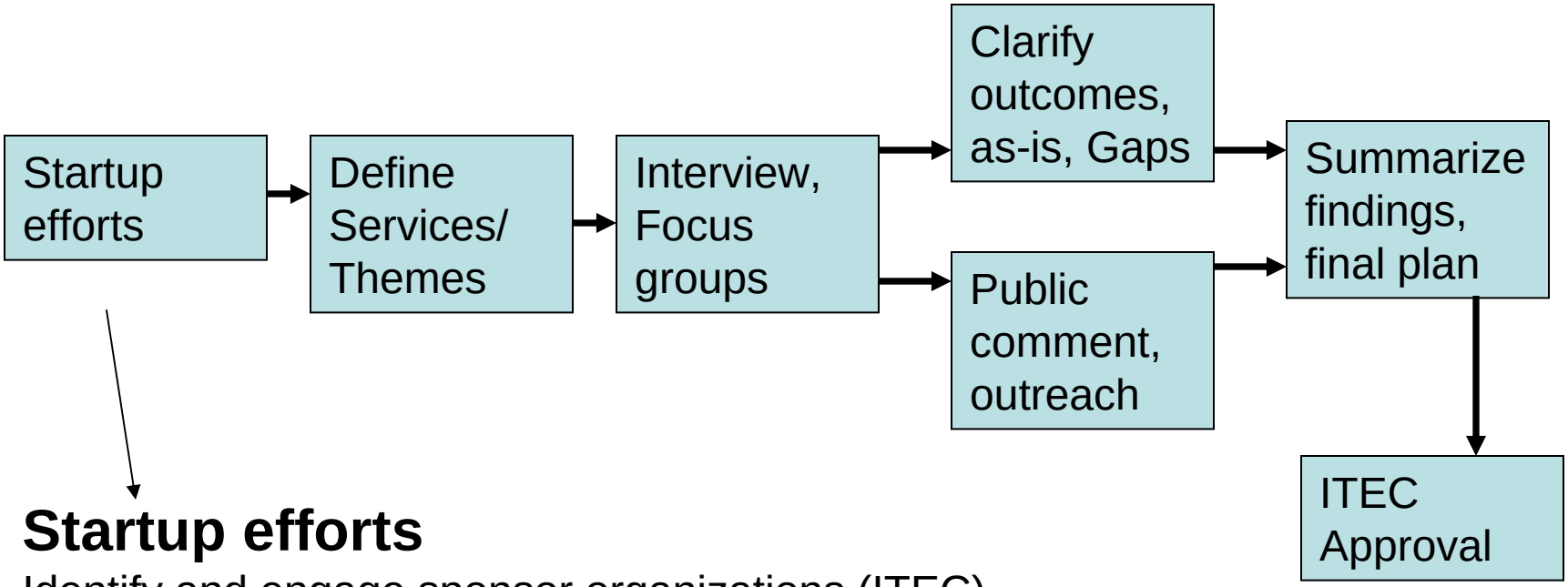
Current Efforts

- Engaging consultant support
- Defining high-level schedule
- Developing high-level outline
- Defining stakeholders
  - Reappoint Strategic Planning subcommittee

Proposed High-Level Schedule



Startup Efforts



Startup efforts

Identify and engage sponsor organizations (ITEC)
Communicate to stakeholders
Review past efforts and existing documents
Define “Customer” groups (business partner subgroups)
Finalize contracts and define outcomes

Proposed SIM Plan Outcomes

- Primary focus of 2-5 years
- Recognize IT initiatives that should be identified and developed in the 5-15 year time range
- Drives and supports
  - Agency 3-year plan initiatives
  - IT projects
- Usable for all audiences

Agency 3-Year IT Management and Budget Plans

http://www.da.ks.gov/kito/ITPlans.htm

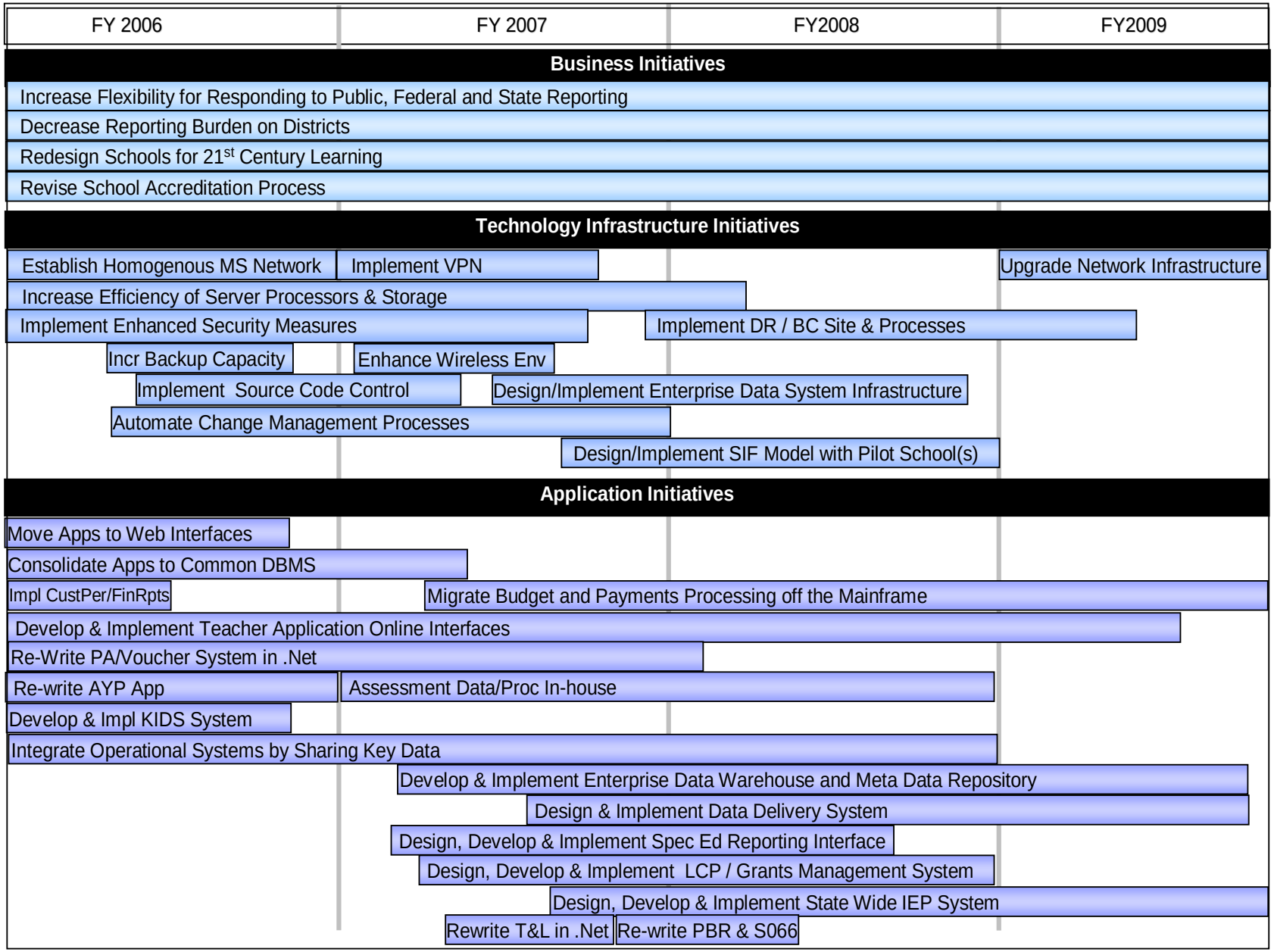
Current Efforts

- Better understanding of the linkages between agency business direction and IT direction with Enterprise Architecture models
- Trending IT asset information
- Using the information collected to do additional analysis on
  - Common communication
  - Common efforts
  - Common direction

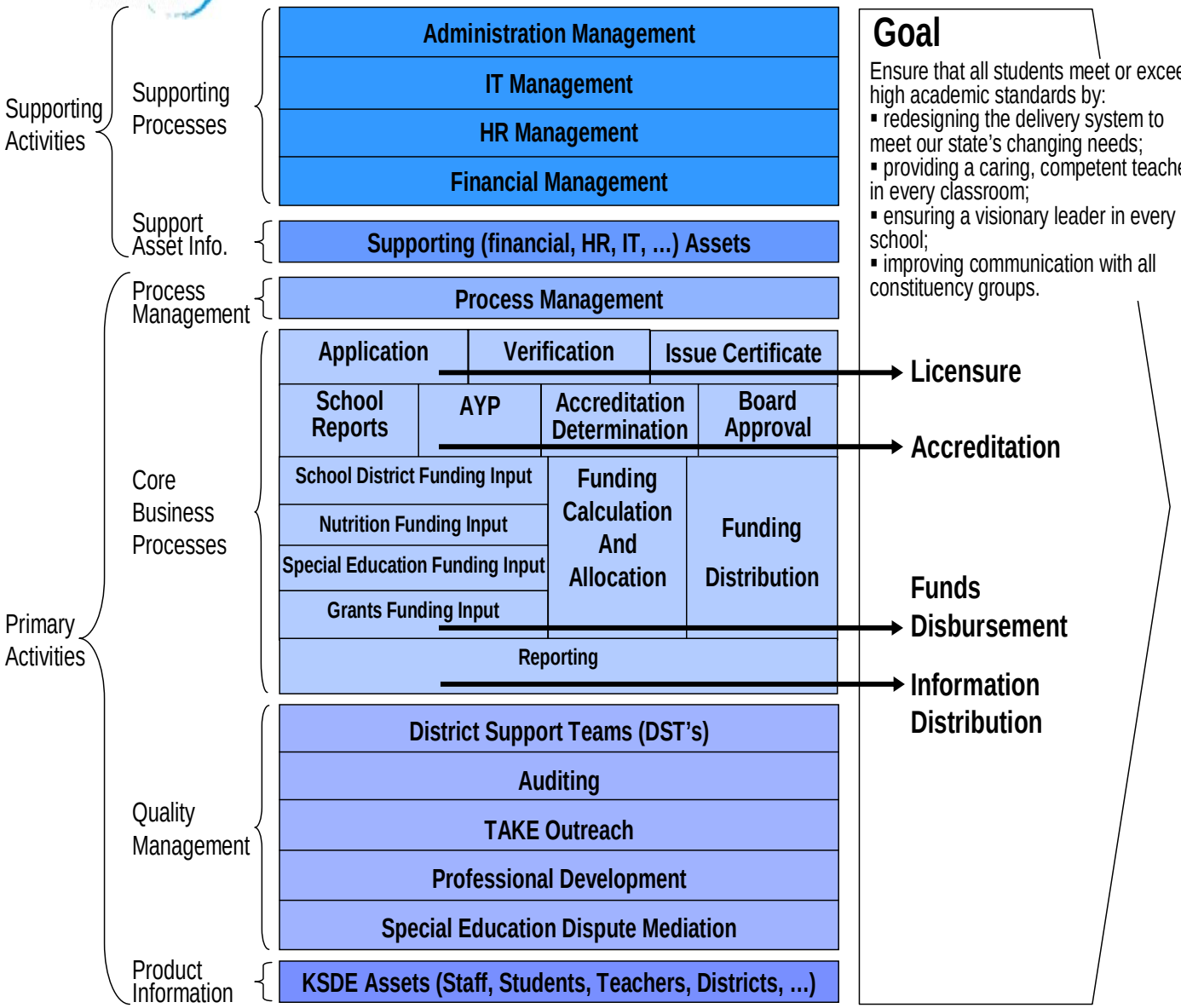
Outcomes

- Provide the CITO's and JCIT with accurate and pertinent information on agency IT efforts and strategies
- Complete enterprise view of systems and assets
- Consistent way to view alignment to strategic plan goals
- Identify new planned projects

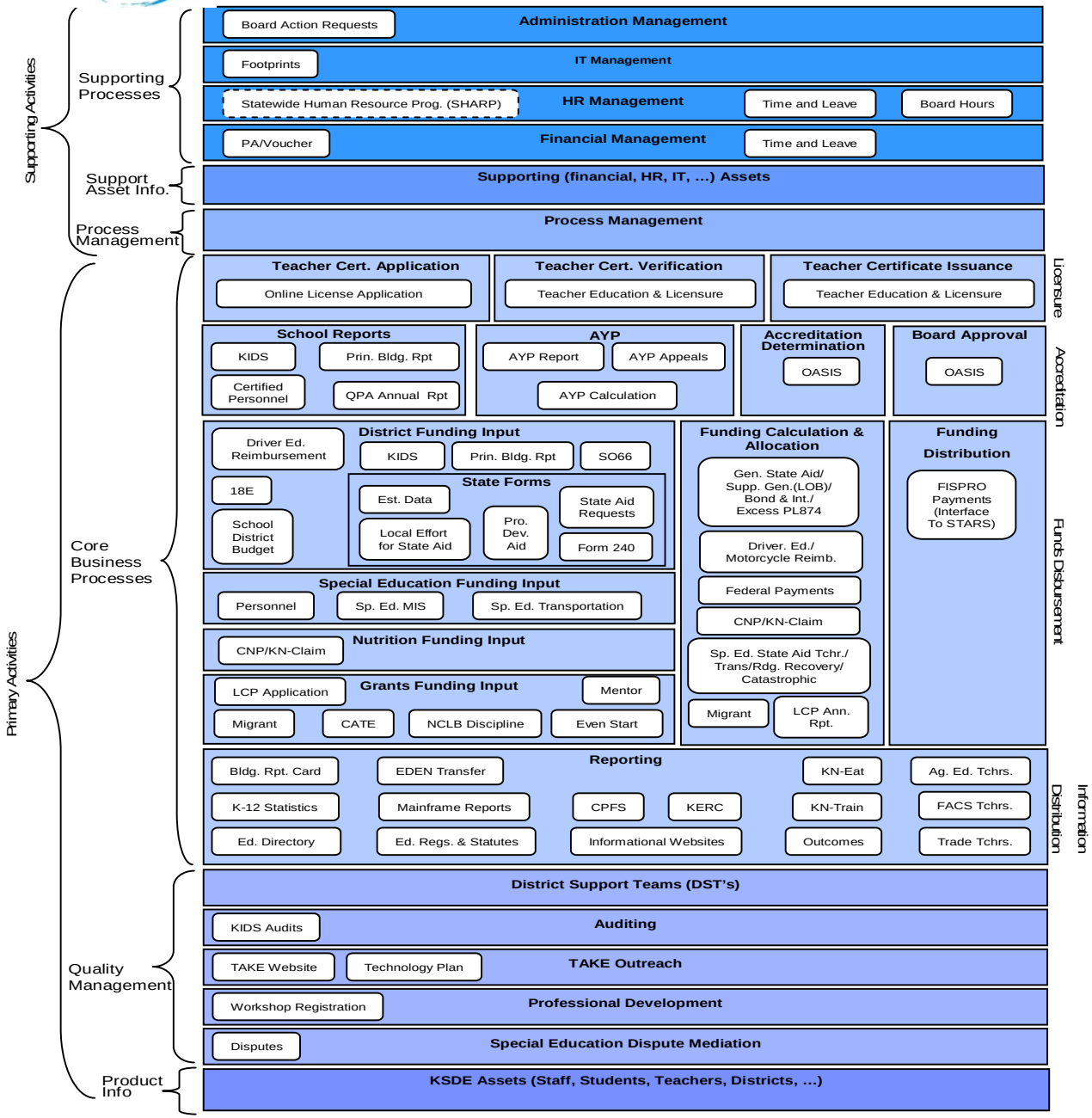
KSDE – Radar Chart



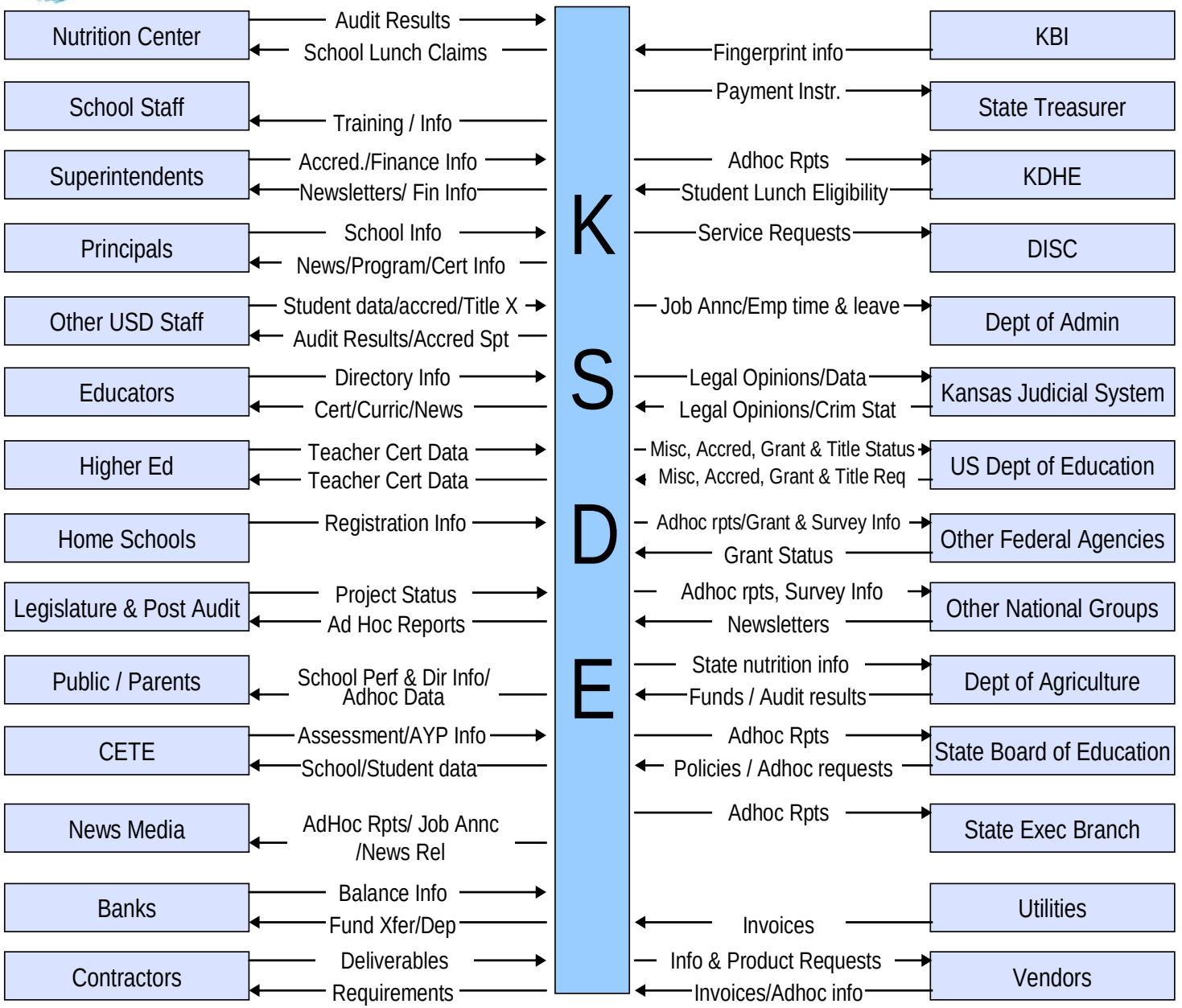
KSDE – Enterprise Value Chain



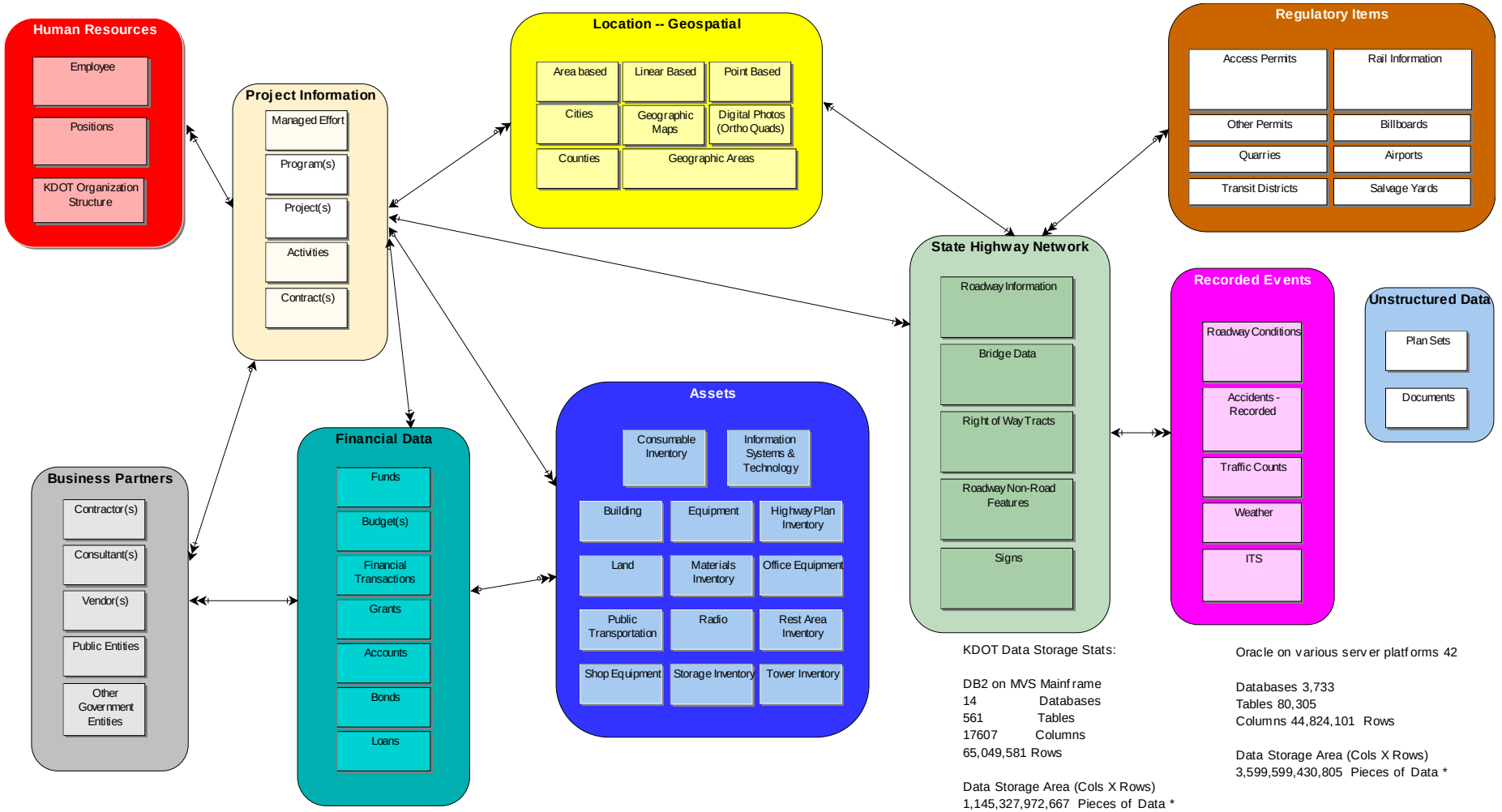
KSDE – Enterprise Application Map



KSDE – Business Partner Communication



Department of Transportation Enterprise Data Map



KDOT Data Storage Stats:

DB2 on MVS Mainframe
14 Databases
561 Tables
17607 Columns
65,049,581 Rows

Data Storage Area (Cols X Rows)
1,145,327,972,667 Pieces of Data *

Oracle on various server platforms 42

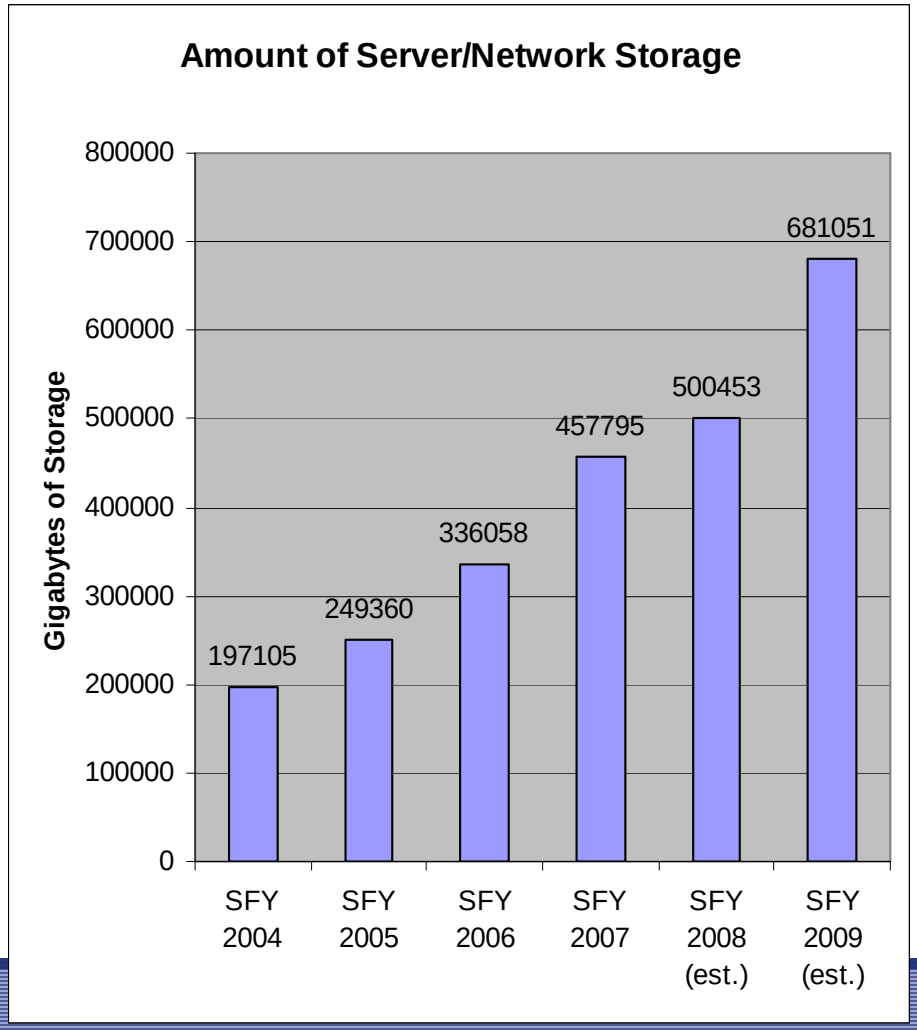
Databases 3,733
Tables 80,305
Columns 44,824,101 Rows

Data Storage Area (Cols X Rows)
3,599,599,430,805 Pieces of Data *

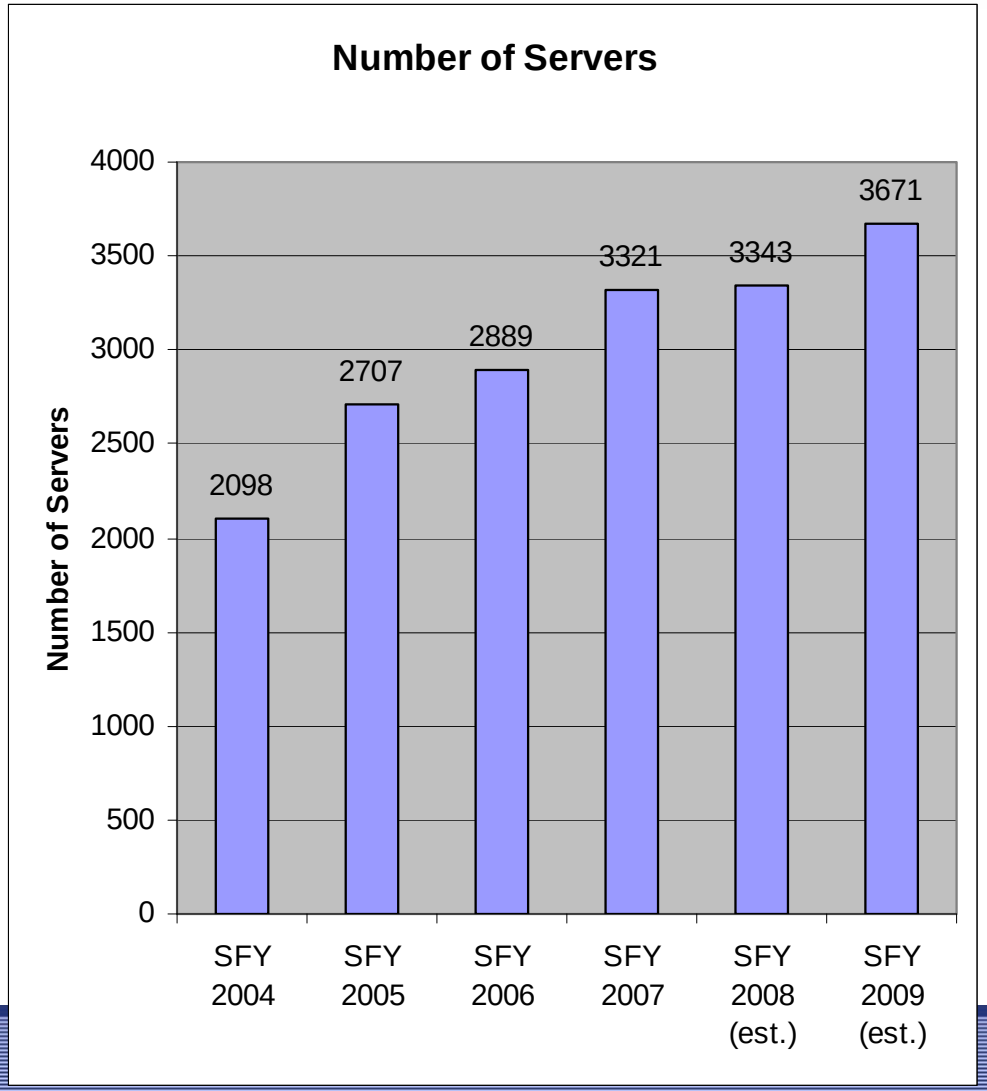
Trends

- IT Evolution trends
  - Storage
  - Servers
- IT Financial status and trends
  - Kansas IT/ Kansas total Budget
  - Kansas with other states
  - Kansas IT Budget
- IT Staffing trends

Trends

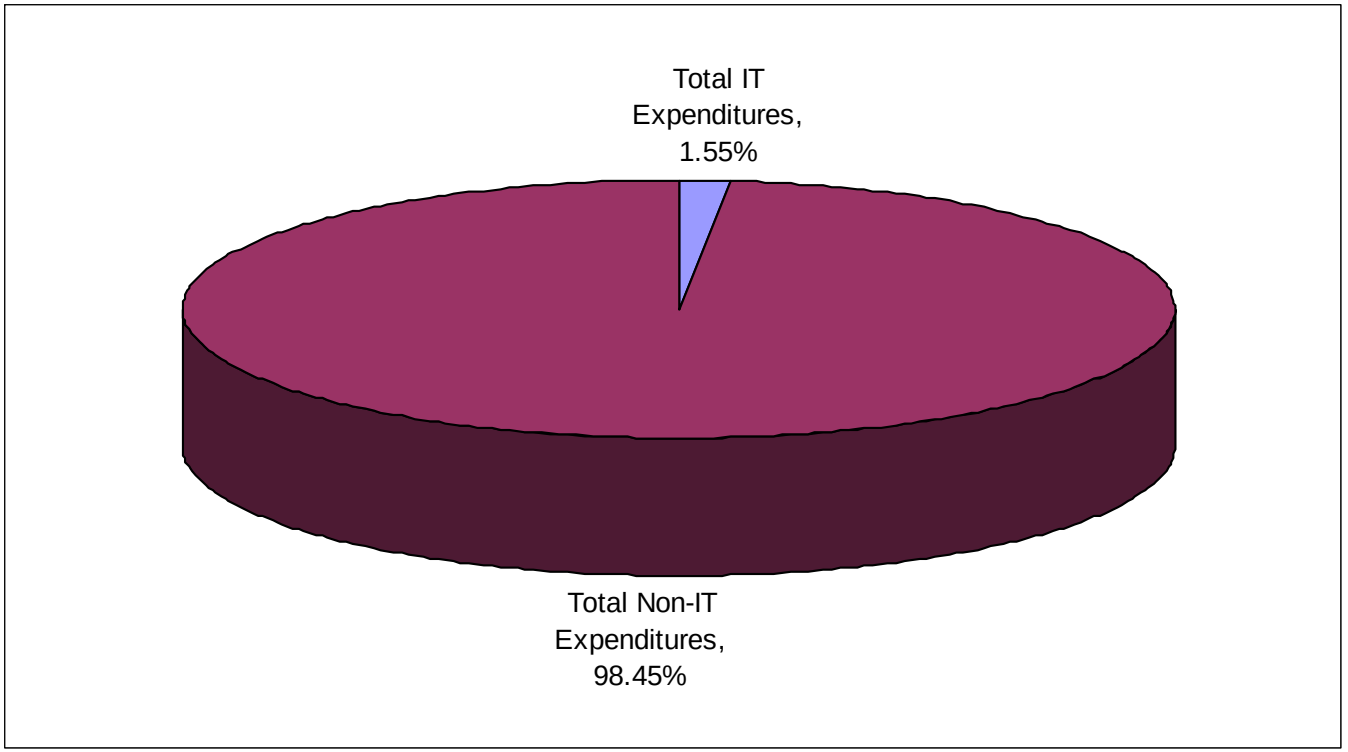

Amount of Server/Network Storage
Gigabytes of Storage
800000
700000
600000
500000
400000
300000
200000
100000
0
197105
249360
336058
457795
500453
681051
SFY 2004
SFY 2005
SFY 2006
SFY 2007
SFY 2008 (est.)
SFY 2009 (est.)

Trends


Number of Servers
Number of Servers
4000
3500
3000
2500
2000
1500
1000
500
0
2098
2707
2889
3321
3343
3671
SFY 2004
SFY 2005
SFY 2006
SFY 2007
SFY 2008 (est.)
SFY 2009 (est.)

SFY 2006 State Budget & SFY 2006 IT Expenditures

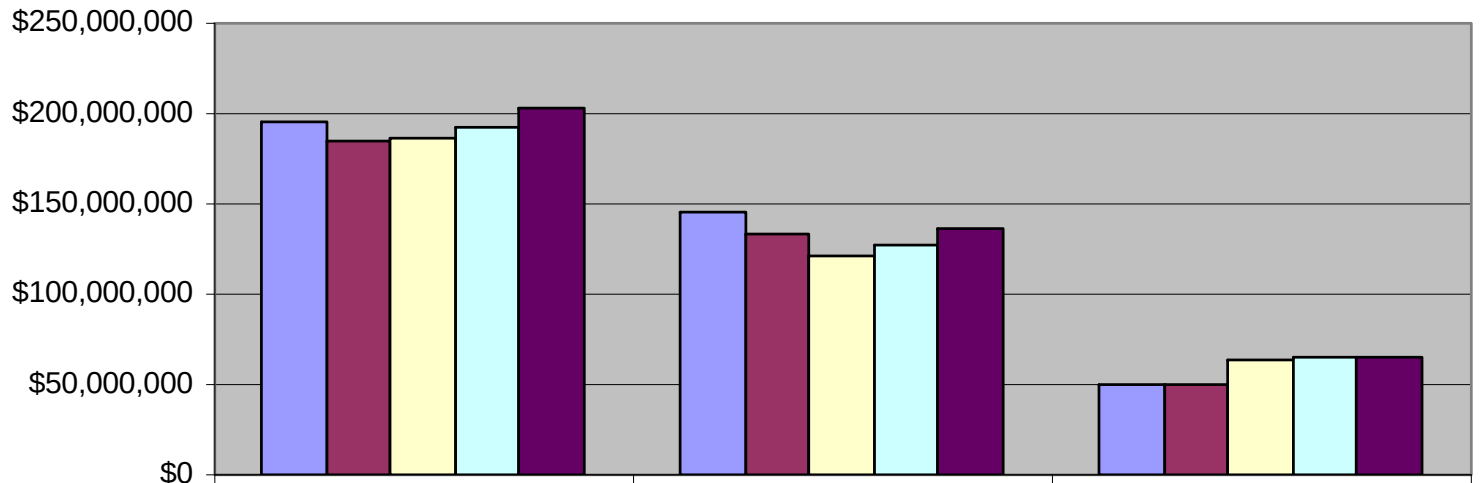
Total State Budget: $11.8 Billion
Total IT Expenditures: $182.8 Million (Does not include salary costs)



IT Expenditures Compared to Other States

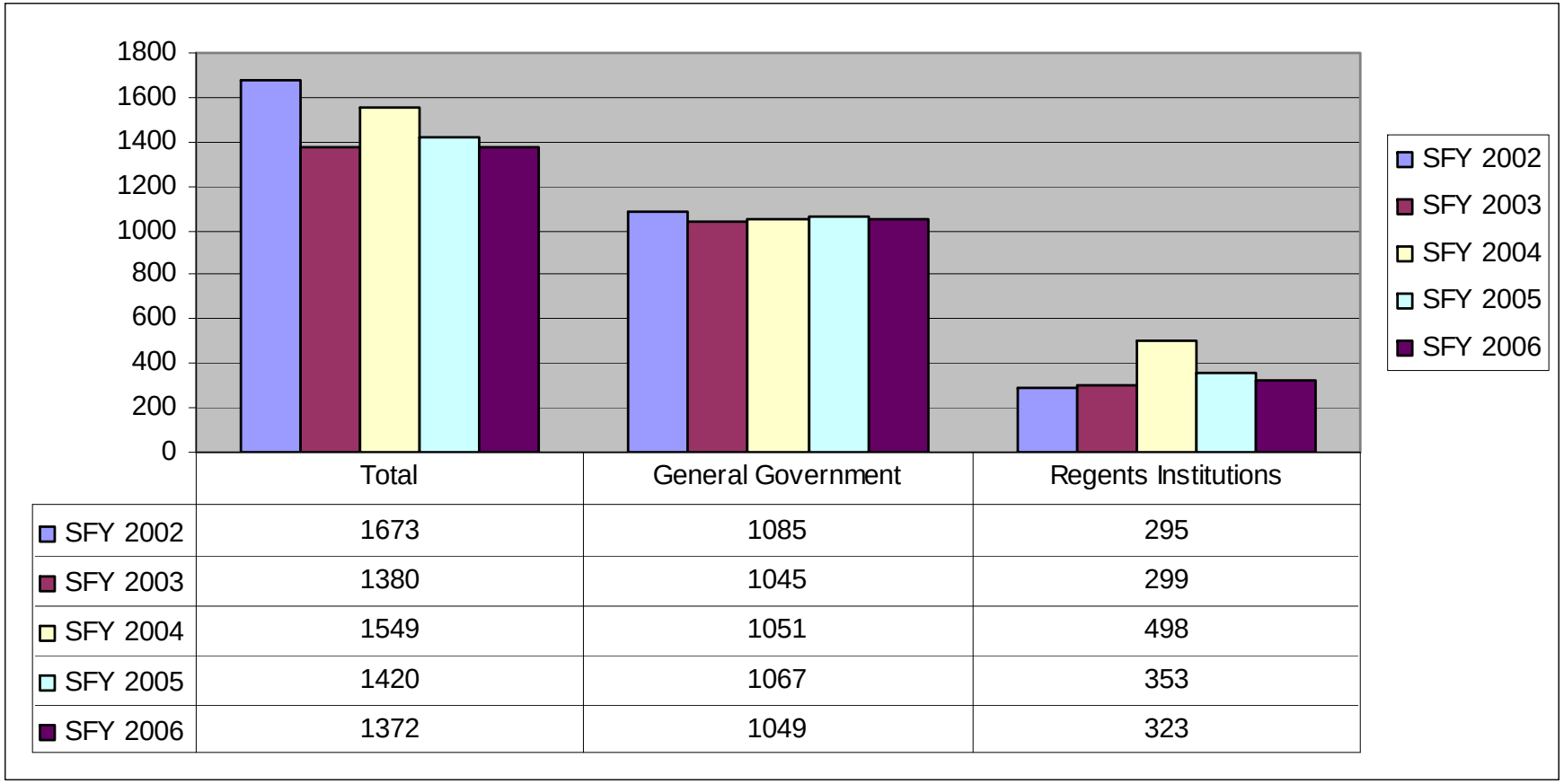
State	% IT / State Budget	Comments
New Jersey	9%	(Executive Branch Only)
South Dakota	4%	
North Dakota	3.80%	
Virginia	3.15%	
Florida	3%	
Iowa	3%	
Texas	2.73%	
Maryland	2.60%	
Kansas	**2.26%**	**(2005 - With Classified Staff)**
Kansas	**2.03%**	**(2006 - With Classified Staff)**
Kentucky	1.96%	
Maine	1.95%	
Kansas	**1.69%**	**(2005 - Without Classified Staff)**
North Carolina	1.60%	
Kansas	**1.55%**	**(2006 - Without Classified Staff)**
Missouri	1.43%	
Massachusetts	0.80%	(Executive Branch Only)

Five Year Trend of IT Expenses (Includes Classified Salary Cost)



	Total	General Government	Regents Institutions
SFY 2002	$195,271,902	$145,613,492	$49,658,410
SFY 2003	$184,272,635	$134,077,634	$50,195,001
SFY 2004	$186,118,417	$121,893,811	$64,224,607
SFY 2005	$193,008,474	$127,118,201	$65,890,273
SFY 2006	$202,308,127	$136,497,500	$65,810,627

Five-Year Trend of Total Budgeted Authorized Classified IT Staff



	Total	General Government	Regents Institutions
SFY 2002	1673	1085	295
SFY 2003	1380	1045	299
SFY 2004	1549	1051	498
SFY 2005	1420	1067	353
SFY 2006	1372	1049	323

Agency Projects

Project Management Support

- Project Management Methodology
- Refresh of Project Management Methodology
- Project Management Training
- Summary of Quarterly IT Project Reports
- IT Project Analysis

Project Management Methodology

- The Kansas Project Management Methodology (PMM)
  - provides common standards to ensure information technology projects are conducted in a disciplined, well-managed, and consistent manner.
  - places heavy emphasis on planning in the early stages of a project.
  - provides well-documented procedures for implementation of the required management processes.
  - has been in place since 1999 with a couple of minor revisions.
  - initiative to refresh was started in June, 2005.

Refresh of Project Management Methodology

- Purpose is to improve its ease of use and broaden its applicability while maintaining oversight controls.
- Contracted with current training vendor to lead effort.
- Conducted focus groups to elicit input regarding project management best practices and identify PMM improvement opportunities from agencies and other interested parties.
- Draft document with recommendations to improve CITO-reportable projects' process and reporting obligations while ensuring oversight has been delivered for review.

Project Management Training

- Project managers learn to apply skills and techniques which enable both small and large projects to meet budget and schedule milestones.
- The project management methodology certification training program is a 120-hour in-class instruction program. All participants must pass a final exam as a condition for certification.
- The State of Kansas has certified over 294 participants since classes were first offered in 1999.
- There are about 30 active IT projects at any given time of which approximately 75% are managed by certified project managers.
- Additional classes have been developed to continually support industries' best practices and meet the demands of increasingly complex projects, tools and advanced practices across multiple projects and organizations.

Quarterly Summary of Agency Projects

- Agencies quarterly project status reports are summarized and presented to JCIT
- Projects variances are evaluated with established measures to report current status
- Planned projects are identified (Approximately 95% of projects are identified in the Annual Summary of Agency 3-Year IT Management and Budget Plans).
- Projects that have completed implementation are identified.

IT Project Analysis

- The Standish Group* reports the following statistics related to the incidence of project failure:
  - 52% of projects will cost 189% of original estimates;
  - 31% of projects are cancelled before completion;
  - 16% of large scale projects are completed on time and within budget.

- In Kansas, over the last two and one-half years there have been 83 active projects. Of those, 52 have completed, 2 have cancelled, 8 have been recast, and the remaining 21 are still active.
  - In 2004, projects cost 90% of their original CITO approved estimates.
  - In 2005, projects cost 95% of their original CITO approved estimates.
  - In 2006, projects cost 100% of their original CITO approved estimates.
  - 2% of projects cancelled before completion; and
  - 97% of projects completed were within the approved budget (did not exceed by 10%).
- Kansas projects are about 49% federally funded and 51% State funded (includes State General Funds and other State Funds)

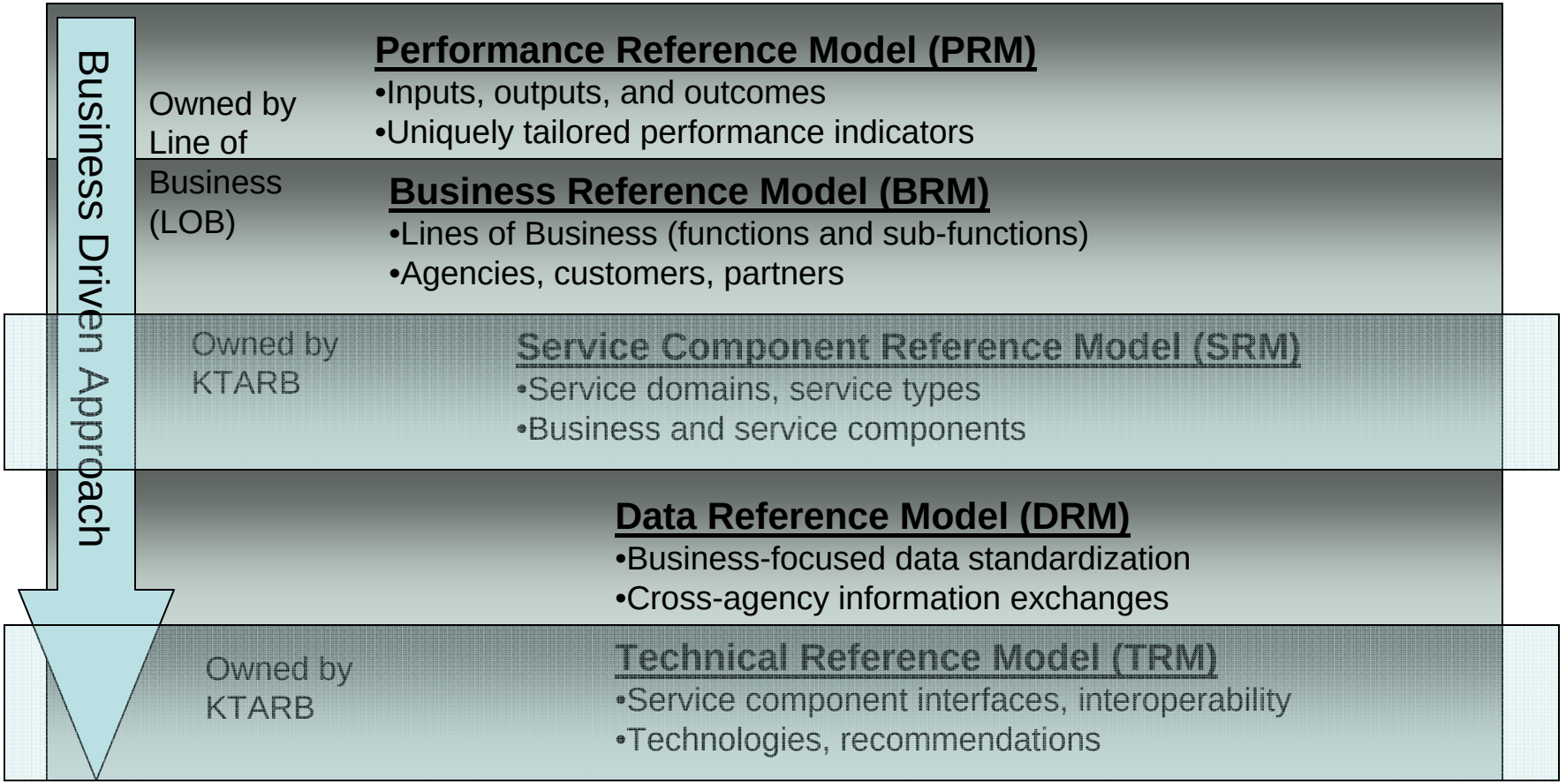
*The Standish Group presented these statistics at the 2006 Symposium on Justice and Public Safety Information Sharing.

Outcomes

- Continuous oversight of large IT projects
- Increase successful projects
- Reduce project failure
- Identify and mitigate project risks throughout the project lifecycle
- Strengthen an enterprise approach to the management of IT projects by state agencies
- Provide a solid base of certified project managers throughout the enterprise
- Ensure IT projects are conducted in proper project management discipline
- Well-managed project planning and execution
- Project collaboration

Enterprise Architecture

Kansas Enterprise Architecture



Current Efforts

- Examining agency 3-Year IT plan information to develop enterprise models showing communication from State Government to:
  - Citizens
  - Businesses
  - Local / County Government
  - Federal Government
  - Other States

Current Efforts

- Developing an Enterprise business model
  - Consistent with other States and the Federal Government
  - Mapping our agencies, systems, functions, and services to this model

Outcomes

- To have a better understanding of the enterprise
- To help agencies move from system level support to business driven enterprise service level to recognize:
  - Where services are consistent
  - Where customers are consistent
  - Where data is consistent
  - Where processes/activities are consistent
- Outcomes are inputs into strategic and tactical planning efforts

Kansas Information Technology Architecture (KITA)

http://www.da.ks.gov/itec/KITAMain.htm

KITA Update Process

- Updated KTARB Membership in fall 2005
- Kicked off the KITA Update Process in March 2006
- 14 Subcommittees were staffed by subject matter experts from the state
- A draft KITA was presented to ITAB and RITC and comments were received
- The KITA draft was modified to reflect those comments
- Final KITA draft is presented to ITEC and passed in October 2006

Participation

- 86 individuals from 20 different agencies participated in the KITA Update
- Agencies involved include:
  - Administration
  - Juvenile Justice
  - Judicial
  - KBI
  - Corrections
  - Education
  - Health and Environment
  - Labor
  - Revenue
  - Shawnee County
  - Transportation
  - Highway Patrol
  - Historical Society
  - Legislative Admin
  - Legislative Post Audit
  - SRS
  - Emporia State
  - Kansas State
  - University of Kansas
  - KU Medical Center

Kansas EA aligns with Federal EA

- KITA supports the Federal Technical Reference Model and Service Reference Model layers
- Kansas will be able to exchange projects, grants and technology components with Federal partners
- KITA has been rebuilt to support Technical Reference Model and Service Reference Model level reporting

KITA V11 Contents

Future Efforts

- KITA online and interactive
- Agency technologies mapped to KITA
- Agency systems mapped to KITA
- Communities of interest collaborate on KITA evolution

Outcomes

- Enterprise view of architecture targets
- Enterprise engaged in architecture evolution
- Aging technology risk minimized
- More agencies use common product suites
- More technical skills are transferable across teams and/or agencies
- Cost to do business of IT minimized
- Projects are successful
- Architecture supports strategy

Questions and Discussion

For Additional Information

http://www.da.ks.gov/kito/