

# State of Illinois - IT Guiding Principles

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AUGUST 2008

## **IT Guiding Principles – Definition:**

- **IT Guiding Principles are fundamental policy statements about the role of IT and the use of technology in support of the business.**
- **Guiding Principles are used by IT Governance and Enterprise Architecture to guide IT decisions and support strategic direction.**
- **Overall, IT Guiding Principles establish directions and core themes for IT that aid the decision-making process and lead to better business and IT alignment.**
- **IT Guiding Principles function as a filter during the decision making process to:**
  - **Reduce both time and expense spent exploring inappropriate solutions**
  - **Promotes consistency in the IT decision-making process**

## IT Guiding Principles – Attributes

- **They are durable statements about the role or use of IT (they don't mention products, vendors or implementing technologies)**
- **They are not “motherhood and apple pie” statements in that they are:**
  - Actionable and set direction
  - Something you could argue for or against (i.e. there are pros and cons of doing this...)
- **They guide decision-making and help to steer a course of direction**
- **They represent the beliefs or mandate of the organization with appropriate sensitivity to the constituents that it serves**

# IT Guiding Principles – Template

## IT Guiding Principle

- Description of the Guiding Principle

## Rationale

- What is the business rationale (motivation) for this principle in terms of qualitative benefits such as economy of scale, reduced costs, efficiency, effectiveness, consistency, flexibility, etc.

## Implications

- Planning actions
- IT ownership decisions
- Organization roles and responsibilities and decision-making rights
- IT asset impacts (people and technology)
- Changes to existing processes or the need for new processes
- Organization and staffing
- Strategic and tactical decision that need to be made
- Changes in behavior
- Management of change and required communications

# **1. Common Information Systems: Develop common systems and share available information systems.**

## **IT Guiding Principle**

- The direction will be towards the use of more enterprise-wide common and shared applications.

## **Rationale**

- Common Information Systems will provide the opportunity for greater IT Asset and Resource advantage, improved economies of scale and reduced costs. In addition to common shared systems, common business processes should be shared to further reduce costs. This will provide more consistency across the state for employees and the public.

## **Implications**

- Common shared enterprise systems opportunities need to be inventoried, confirmed, validated and communicated
- Technology transfer needs to occur, along with the creation of common information systems
- Business process standardization needs to occur in conjunction with common systems and the benefits of this should be highlighted
- Systems plans need to be integrated across agencies and aligned with strategic plans
- Requirements need to be considered/analyzed across agencies to design/implement common shared systems.
- IT resources (e.g. applications dev. and design) will need to be pooled and shared across agencies
- Budgeting for common shared systems will need to be managed centrally
- Coordinated development and testing will need to occur
- IT Governance and ARB planning and review processes will need to identify common systems opportunities and steer decisions towards common solutions, where feasible

## **2. Asset Reuse: Reuse existing capabilities before you buy, buy before you build.**

### **IT Guiding Principle**

- The direction will be towards the reuse of the best IT assets (applications, hardware and software) before a purchase is made. When new assets are needed (e.g. an application), off-the-shelf packaged software solutions are preferred over custom development.

### **Rationale**

- Reuse of existing assets (e.g. applications) helps to reduce costs, standardize and simplify the IT environment. Packaged solutions are a lower risk approach to implementing new functionality, have a lower cost of ownership in the long run and can reduce the time to implementation.

### **Implications**

- Standards and assets to be reused must be identified from within the state and from other states
- Best practices and core competencies need to be identified
- Research on asset reuse must be a continuous process
- The ongoing viability of assets must be continually assessed
- Architect roles need to be defined and staff engaged in new projects to foster reuse  
Functional characteristics of IT capabilities must be understood to determine re-use potential
- IT Governance and Architecture processes must be in place to ensure reuse
- Cost/benefit analysis, including TCO (one-time and ongoing costs), should be analyzed when decisions are made not to reuse an existing capability
- The State CIO must approve exceptions to the reuse principle, and the sponsor of the proposed solution must document the decision and reasons behind it
- Business functions should adapt to the packaged system

### **3. Sourcing Strategy: Acquire Information Technology in a manner that makes use of full and open competition and maximizes return on investment.**

#### **IT Guiding Principle**

- IT acquisitions will be made with full and open competition in a manner that maximizes ROI. The measures for return on investment should not just consider the TCO; they should include initial costs, the ongoing costs to manage and operate and the qualitative and quantitative benefits of the solution.

#### **Rationale**

- Open competition helps to reduce cost, but acquisitions must also consider TCO (one-time and sustaining costs), as well as the overall ROI of a solution.

#### **Implications**

- Technology building blocks must be defined in a manner (e.g. functional descriptions, standards, etc.) that will allow for multiple vendors products to be considered
- Total cost of ownership needs to be considered beyond just the hardware and software product costs and include the costs to run and maintain a managed environment
- Standards must be identified
- Shared risks and rewards should be developed with providers
- Lead times must exist to solicit bids from multiple vendors
- The Architecture must be flexible to accommodate more than one vendor
- Architects and IT management must be involved in the analysis of proposed solutions
- Full and open competition should be promoted

## **4. Research and Acquire “Off-The-Shelf” solutions: Proactive analysis of off-the-shelf solutions that meet the needs of the business needs to be a function of the IT Organization.**

### **IT Guiding Principle**

- The central IT organization will research and acquire off-the-shelf software that meet the needs of the business and conforms processes to the standards purchased. The central IT organization will continuously evaluate emerging solutions for the business.

### **Rationale**

- This enables the buy versus build and “reuse strategy” to help reduce costs, improves standardization and reduces risks. By being proactive, the IT organization can help lead the business.

### **Implications**

- IT must become aware of business needs and how off-the-shelf solutions can meet them
- IT needs to know what the key criteria are for solutions
- Vendors need to work with the state to extend products and to have those extensions built into base software solutions
- Business functions need to be adapted to the off-the-shelf “packaged solution”
- Standards must be defined, formalized, maintained and communicated
- Application solutions will need to be mapped to the business areas and functions that they enable
- Resources must be assigned to research solutions by business and technical areas

## **5. Legacy Applications and Infrastructure Assets: The state will proactively retire legacy assets based upon technology lifecycle, shared services opportunity and cost/benefit analysis.**

### **IT Guiding Principle**

- The central IT organization will work with the agencies to proactively manage and retire legacy assets including business applications and infrastructure, based on the application or technology lifecycle, shared services opportunities and cost/benefit analysis.

### **Rationale**

- Reducing the numbers of legacy applications and technology components will simplify the IT environment and reduce ongoing support and maintenance costs. Reduction will help achieve IT standardization and will improve interoperability and the ability to leverage/share IT resources. By focusing on enterprise shared services opportunities, the state will see a higher ROI on IT investments.

### **Implications**

- Legacy assets must be reviewed and their lifecycle status (e.g. to be retired) indicated
- When initiatives are being considered that impact legacy assets, an analysis must occur to consider shared services opportunities, standards for replacement, and a business case for their replacement
- Roadmaps must be developed that depict the retirement and replacement strategy for legacy assets
- Off-the shelf application solutions must be considered for legacy replacement

## **6. Strategic Planning: Strategic Planning will be integrated across the state to help focus on common shared service opportunities.**

### **IT Guiding Principle**

- Strategic planning will become an integrated activity across the state to help focus on common shared service opportunities, set direction and prioritize initiatives, and manage overall IT investments.

### **Rationale**

- Integrated strategic planning will help to identify synergistic opportunities, reduce overall costs and prioritize investments. Such planning will help maximize the states ROI on IT investments.

### **Implications**

- Standardized planning and budgeting processes must be put in place
- Integrated planning takes longer than individual planning, therefore longer lead times may be required
- OMB processes will be impacted with coordinated planning
- Budgeting processes will be impacted with coordinated planning
- Prioritization of initiatives will require agency and cross-agency inputs
- Cross-agency roadmaps will need to be created
- Additional centralized staff may be required
- Agency business executives priorities and opinions will need to be represented

## **7. Resource Sharing: High demand IT resources with knowledge of common shared service capabilities will be leveraged across the state.**

### **IT Guiding Principle**

- Workforce resources are dedicated to agencies today. In the future, high demand IT resources with knowledge of the common shared capabilities (infrastructure, common applications, systems software) will be leveraged across state agencies.

### **Rationale**

- Common resource needs will be pooled, resulting in higher leverage/utilization and lower personnel costs. The state will build up high demand centers of competence and improve overall service delivery. Agencies will be able to tap highly-skilled resources for project needs and lower contractor costs.

### **Implications**

- Resource ownership and organizational issues must be addressed
- Standardized competencies are needed to develop leveraged pools of knowledgeable resources
- Highly-skilled resources should be retained
- Supply and demand should be managed
- Skills inventory should be created
- Compensation should match roles and skills
- Career models need to be created

## **8. Constituent Value: Deliver value to the state, citizens and business customers cost effectively and at acceptable levels of service.**

### **IT Guiding Principle**

- Deliver value to the state, its citizen and business customers cost effectively and at acceptable levels of service.

### **Rationale**

- The state is in business to serve its citizens and business customers. It must do so in a cost-effective manner and at an acceptable level of service through efficiencies that improve productivity.

### **Implications**

- The state must implement cost effective solutions
- The state needs to focus on its constituents when developing its solutions
- A balanced scorecard, which includes constituents, must be considered for IT-enabled state services that touch constituents
- The state must maximize ROI on IT investments
- There needs to be proactive management of service levels, not only of the infrastructure supporting internal state employees, but also for constituents that it serves through its various service channels.