# County of San Diego Guiding Principles

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1. Technology Risk Management

**Technology Risk Management**
Enterprise-wide IT risk will be evaluated through standard policies, procedures, and a governance model to identify appropriate mitigations for the County as an enterprise.

**Rationale:**
The tradeoffs between business value and risk must be considered at the enterprise level. Evaluating and communicating acceptable levels of risk will ensure optimum protection of resources within the business and the County overall.

**Implications:**
- Business-specific technology risks will be managed at the appropriate level (e.g., by Governance bodies and working groups such as Cloud Review Committee) in accordance with enterprise-wide standards, policies, and procedures, and escalated to ITMC as appropriate.
- Criteria and thresholds will be defined so independent oversight will occur on technology implementation projects.
- The solution architecture process will define the solution that meets the business unit’s acceptable risk standard in balance with other factors, including cost and functionality.

2. IT Investment Management & Governance

**IT Investment Management & Governance**
Management of IT investments (e.g. allocation of IT resources, funding of projects) will align with the County’s strategic objectives and the General Management System.

**Rationale:**
Focusing IT investments on the County’s most important priorities maximizes business benefit achieved from IT resources.

**Implications:**
- IT investments will be well-defined by business cases to:
  - Provide an analysis of costs, benefits, value and risks
  - Demonstrate compliance with County Service Levels
- IT investments will be guided by defined governance with equitable representation from executive, business and technology groups.
3. **Enterprise IT Costs**

<table>
<thead>
<tr>
<th>Enterprise IT Costs</th>
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<tbody>
<tr>
<td>The County will share the costs of enterprise-wide IT initiatives, resources and assets, and will strive for transparency, fairness, and predictability in cost allocation.</td>
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**Rationale:**
County-wide sharing of costs for commonly used IT resources and assets will increase consistency, transparency and cost efficiencies.

**Implications:**
- Business group-specific IT resource costs may not be shared.
- Budgeting, pricing, cost models, allocation practices and reporting will be implemented and communicated across the County.

4. **Reuse, Buy, Build**

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<thead>
<tr>
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<tbody>
<tr>
<td>The County will follow a rigorous solution architecture process that will implement the following preferences for delivering new functionality:</td>
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<tr>
<td>- To meet requirements for new business functionality, the County prefers to re-use existing County applications, services, tools, components and functions.</td>
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<tr>
<td>- The County will seek to acquire the functionality in COTS or Cloud based software.</td>
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<tr>
<td>- For functionality that cannot be acquired, the County will consider business process re-engineering and custom development as a third alternative.</td>
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**Rationale:**
Clear articulation and adherence to prioritized criteria for reuse / buy / build decisions will ensure greater flexibility, extensibility and cost/time efficiencies in technology solution development, deployment, and maintenance.

**Implication:**
- Existing County technology assets (e.g. applications, services, tools, components and functions) will be documented and available for reuse.
- Prioritized criteria for reuse/buy/build decisions will be documented and used consistently in analysis for delivering new functionality.
- A high-level of connectivity and interoperability among all hardware, software, communication components, external suppliers / vendors, and customers will be sought.
## 5. Enterprise Architecture

**Enterprise Architecture**
The County’s Enterprise Architecture, developed and maintained with the participation of technical and business unit groups, will be used as the authoritative source for County technology, information, and application architecture standards.

**Rationale:**
Enterprise architecture ensures consistency, enhances integration, and improves quality and cost efficiency in the design and delivery of technology solutions across the enterprise.

**Implications:**
- The County will build on industry standards to take advantage of mainstream technologies and solutions, to minimize lock-in and to make use of open standards and best-of-breed solutions in the County EA.
- County business groups must play an active role defining requirements while adopting enterprise architecture standards for County-wide benefit.
- Business technology solutions will adhere to the County’s Enterprise Architecture standards.
- Exceptions will be made through a managed process, based on unique business and/or technology requirements.

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## 6. County Standards Compliance

**County Standards Compliance**
All County IT solutions and services will comply with County security, privacy, technical, and other standards, and will meet appropriate audit, regulatory and legal requirements.

**Rationale:**
Well-documented and consistent adoption of County standards will protect enterprise resources.

**Implication:**
- County standards will be reviewed and communicated on an on-going basis to ensure compliance.
- This principle should be applied when negotiating IT service contracts.
### 7. Service Levels

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<tr>
<td>The County’s Solution Architecture process will ensure that service levels for availability, performance, capacity, and scalability are specified.</td>
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**Rationale:**
Explicit service levels and agreements will enable delivery of required services.

**Implication:**
- Contract management will be required to review and monitor service level agreements and ensure appropriate contract leverage.
- Reporting of performance against documented Service Levels will be required to provide transparency and identify trends or service improvement needs.

### 8. Technology Adoption

<table>
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<tbody>
<tr>
<td>The County will adopt technology using a “fast follower” profile for systems of record (bimodal mode 1) and will consider early adoption for systems of innovation and differentiation (bimodal mode 2).</td>
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</table>

**Rationale:**
A bimodal approach to technology adoption will allow the County to drive innovative, state of the art technology solutions in balance with managing costs and risks.

**Implications:**
- The County will be quick to adopt proven technologies
- The County will consider technologies closer to the bleeding edge for innovative business solutions and areas where technical currency is a key driving factor.
9. Innovation and Continuous Improvement

Innovation and Continuous Improvement
The IT organization is a catalyst for innovative change, and actively encourages exploration of technology innovation for business benefit. The IT infrastructure will enable continuous technology evolution (grow, add or change) while minimizing impacts to infrastructure use and improving operational performance.

Rationale:
Technology is an integral part of the County’s business, and the IT organization is responsible for spearheading technological innovation and solutions in partnership with business groups for business value.

Implications:
- IT will develop and maintain a digital workplace environment that serves to attract and develop an agile, adaptive, knowledgeable and skilled workforce that will make informed technology decisions and deliver business-driven technology solutions.
- The County will selectively support and evaluate innovation pilots/prototypes to determine how they can be adopted as enterprise-wide services.
- External IT service providers and vendors are expected to enable and offer innovation where it brings benefit to the County.
- Service providers are also expected to drive continuous improvement throughout the service lifecycle by developing and maintaining an understanding of County service improvement and innovation needs, and by measuring outcomes against the expectations defined in system business cases.
### 10. Lifecycle Management

**Lifecycle Management**
The County will manage the lifecycle of IT products and services.

**Rationale:**
IT Lifecycle management is needed to contain the O&M cost of the IT portfolio and to maintain technical currency and supportability.

**Implications:**
- Lifecycle management will leverage the original business case associated with the system to facilitate periodic assessments of functional, technical, and financial aspects of County IT services, applications and infrastructure.
- Lifecycle management will determine appropriate future actions in alignment with the Enterprise Architecture.

### 11. User Experience

**User Experience**
County technology solutions will be designed to optimize the user’s experience while maximizing sharing and reuse of technologies and services.

**Rationale:**
Technology solutions need to be user-centric in design, delivery and deployment to maximize business value and adoption.

**Implications:**
- County Solution Architecture process and methods must take UX into account.
- The user’s experience will be optimized based on the user’s authorizations and the capabilities of the user’s device and access channel.
- User experience solutions will maximize sharing & re-use of technologies and services across all devices and channels for consistency.
## 12. Development Practices

<table>
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<tr>
<th><strong>Development Practices</strong></th>
<th>All internal and external development will follow leading industry and County adopted practices and processes, including the clear definition of requirements.</th>
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</table>

**Rationale:**

Common methods will ensure improved quality, predictability, reliability and efficiency of application development and delivery.

**Implications:**

- Joint participation by the business and technology staff throughout the development process will ensure business focused activities including solid definition of business requirements.
- Rigorous, repeatable practices and processes, such as those consistent with the Software Engineering Institute’s Capability Maturity Model (SEI CMM) Level 3 will be used.
- County-wide project reporting standards will be followed.
13. **Enterprise Information Management**

**Enterprise Information Management**
The County will leverage its existing Enterprise Information Management (EIM) strategy and program that includes stakeholders from the business groups and the County Technology Office.

**Rationale:**
Enterprise Information is an asset that must be managed and leveraged for business benefit across the County.

**Implications:**
- The EIM program will build on and implement County-wide information standards to be developed in the Enterprise Architecture, including a consistent enterprise data model.
- County policies and processes for information access and use will be governed by the EIM program.
- The EIM program will ensure that any aggregation of data will trigger a review to determine if different policies apply to the aggregated data, and to implement those policies.

14. **Third-Party Access**

**Third-Party Access**
Access to system or business resources shall only be granted via explicit discretionary access control (e.g., identification, authentication and authorization) in accordance with County security policies.

**Rationale:**
Access based on County security and role-specific policies will ensure appropriate access is provided with maximum protection of resources with minimal administration and disruption.

**Implication:**
- County will provision appropriate access for third-parties as needed to support the business.
- Third party access must adhere to this principle and standard County processes that include business and CTO Security participation.
## 15. Business Continuity and Disaster Recovery

<table>
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<th><strong>Business Continuity and Disaster Recovery</strong></th>
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<tbody>
<tr>
<td>Business continuity is a responsibility of the business groups. IT disaster recovery, including data recovery, is a shared responsibility among business groups, the County Technology Office, and IT outsourced vendor(s).</td>
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**Rationale:**

The County’s business groups, technology office and outsourced vendor(s) will collaborate and plan to ensure minimal disruption to business operations.

**Implications:**

- The allocation of resources to business continuity shall be determined by the impact of service disruption, the cost of service availability protection and the cost of service restoration.
- Business Continuity Plans maintained by the business groups will serve as inputs to the IT disaster recovery approach and plan.
- Any data that is needed for mission critical operations must be backed up using a backup/restore solution consistent with the Enterprise Architecture.