

APPLICATION AND DATABASE SERVICES**3.2 Systems Development and Support**

DTI offers full System Development Life Cycle (SDLC) services based on application of best practices, and delivers software solutions that are designed to meet the business requirements of State customers and comply with State standards. This applies to applications of any scope

- Planning (Business Analysis, Requirements Gathering, and Analysis)
- Design thru Implementation (Logical and Physical Data design, Functional System Design and Technical Specification, Code, Test, and Implement)
- Release Management
- Ongoing maintenance, enhancement, and production support

List of services

1. Business Analysis and Requirements Gathering and Analysis
2. Design thru Implementation
3. Release Management
4. Ongoing maintenance, enhancement, and production support

APPLICATION AND DATABASE SERVICES

1. Business and Requirements Analysis

Service Description – Business and requirements analysis and requirements gathering services are available for all projects stemming from an approved business case. As part of the system design process, DTI is prepared to assist you with gathering, analyzing, and documenting business needs and detailed requirements for implementing an IT solution.

Features / Benefits / Costs – Business Analysts focus on identifying requirements in the context of helping you meet strategic goals through internal changes to policies, processes, and information systems. A thorough understanding of the business environment in which information systems are expected to perform and how the business and the system are to align is required for successful solutions to be implemented.

Requirements Analysts focus on all tasks that are undertaken to investigate, scope, and define a new or enhanced system. The analyst function is the most important part of the system design process because the resulting requirements are documented and provide the foundation for system designers to design a solution.

Costs are determined by the complexity and scope of the given effort. The current billing rates are found on the DTI web site under [*Cost Allocation](#).

DTI follows an internally defined Rough Order of Magnitude (ROM) estimating process. The majority (and possibly all) ROM Requests will come from the Technology Investment Management System (TIMS) application. The estimating process is used to provide a quantitative result based on assumptions that form the basis of the estimate. These estimates may be used for strategic decisions, long range planning, or simply to respond to the questions of “How big is the bread box?”

How to request services – Organizations desiring Business or Requirements Analysis or a ROM estimate, should contact their [*Customer Relationship Specialist](#).

Applicable policy / standards / forms –

[ROM Process Document](#) – your [*Customer Relationship Specialist](#) will have,

[ROM Process Templates](#) – your [*Customer Relationship Specialist](#) will have,

[*DTI - Technology Investment Management System](#),

[DTI Data Classification Policy](#), [DTI Data Classification Guideline](#)

[Business Requirements Document](#) – your [*Customer Relationship Specialist](#) will have,

[Detailed Business Requirements Document](#) – your [*Customer Relationship Specialist](#) will have,

[*Project Toolbox](#),

[*Secure Data Transport -- Data Encryption](#),

[DTI Statewide ePayment Standard](#), and [*Systems Environment](#)

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2. System Design thru Implementation

Service Description – DTI provides IT software solutions through defined Systems Development Life Cycle phases of design thru implementation for all projects stemming from an approved Business Case. Application software development and/or application implementation is provided by working independently or in conjunction with other State or external IT organizations. DTI will architect, build, assemble, and implement various software components needed to satisfy business requirements.

Features / Benefits / Costs – A goal of standardizing on Application Development Tools is to promote an environment that will support the move to e-Government and the tight integration of services to citizens. Application Development environments work within the State’s IT infrastructure; use the English language and the ISO 8859-1 Western Character Coding set; provide version control; support source control; provide backup and restore, and check-in and check-out security for the programming environment; and are in “General Support” phase by the vendor who publishes the tool.

Derived Benefits:

- Ensure that the state’s technology investments are developed, supported, and used in a secure and cost effective manner
- Ensure that opportunities for sharing and leveraging are exploited.
- Improve standardization and manageability
- Improve the probability of successful customer initiatives

Application Development tools are referenced in the [DTI Applications Development Tool Standard](#) document.

Costs are determined by the complexity and scope of the given effort. The current billing rates are found on the DTI web site under [*Cost Allocation](#).

How to request services – Organizations desiring System Design through Implementation services are to contact their [*Customer Relationship Specialist](#).

Applicable policy / standards – See [DTI Enterprise Standards and Policies](#) on the DTI web site.

Other documents:

*[Panapt Documentation](#) (DOC)

*[Project Toolbox](#) - SDLC documents developed by Applications Delivery Team

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3. Release Management

Service Description – Release Management is the discipline within software engineering of managing software releases. As software systems, software development processes, and resources become more distributed, they invariably become more specialized. Furthermore, software products (especially web applications) are typically in an ongoing cycle of development, testing, and release. Add to this an evolution in the platforms on which these systems run, and you've got a lot of moving pieces that must fit together to guarantee the success and long term value of a product or project. The need exists for a resource to oversee the development, testing, deployment, and support of these systems. This resource must have a general knowledge of every aspect of the software development lifecycle, various operating systems and software application platforms, and an understanding of different business functions and perspectives. Release Management addresses this need.

In addition to providing end-to-end management services for software developed by DTI, DTI provides Release Management Services (RMS) for applications that are not developed by DTI but that require controlled testing before being released to the production environment. DTI can assist Agencies with Third Party Software in the development of release policies and planning; fit and release testing; roll-out planning; communication and training; and distribution and installation of software releases.

Features / Benefits / Costs –

- Bundled requests into releases sized appropriately and in accordance with a pre-determined frequency schedule
- Improved standardization and manageability
- Improved probability of successful customer initiatives

Costs are determined by the complexity and scope of the given effort. The current billing rates are found on the DTI web site under [*Cost Allocation](#).

How to request services – DTI provides Release Management Services for those Production Systems that have this service defined in the Agency Service Level Agreement. Project Managers for a given project and the appropriate CRS will work with the Information Resource Manager and Application Owner to develop a Service Level Agreement between DTI and the Owning Agency.

Applicable policy / standards – See [DTI Enterprise Standards and Policies](#) on the DTI web site.

Change Control Procedures, Change Control Templates, Escalation Procedures, Release Management Process, and Release Management Templates – your [*Customer Relationship Specialist](#) will be able to point you to these documents.

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4. Ongoing maintenance, enhancement, and production support

Service Description – DTI provides ongoing maintenance, enhancement, and production support for systems in which DTI has had an active role in the development and that meet DTI standards and infrastructure requirements. There are four types of services: Enhancements, Ad hoc requests, Maintenance, and Break-fixes.

Features / Benefits / Costs –

- Enhancements - Permanent additions and or changes which increase functionality, improve usability, etc.
- *Ad hoc* requests - Requests that address exceptions and are often of a “one-time” basis, e.g., a one-time report, training for new customers, customer requested meetings.
- Maintenance - Services provided to ensure the effective and efficient operation and well-being of the application system, e.g., periodic data purging, regression testing due to operating system upgrades, backup and or recovery support, periodic data updates and or refreshes from external sources.
- Break-fixes - Troubleshooting and resolution of processing and/or data related problems, which produce erroneous results.

Costs are determined by the complexity and scope of the given effort. The current billing rates are found on the DTI web site under [*Cost Allocation](#).

How to request services –

Project Managers for a given project and the appropriate CRS will work with the Information Resource Manager and Application Owner to develop a Service Level Agreement between DTI and the Owing Agency. Ongoing maintenance, enhancements, and production support is provided to agencies with an approved SLA on file at DTI.

Applicable policy / standards – See [DTI Enterprise Standards and Policies](#) on the DTI web site.

*[Project Toolbox](#)

Change Control Procedures, Change Control Templates, and Escalation Procedures
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