2011/004 – Portfolio Panels for IT Services

Definition of IT Services

The definition for IT Services supports the Portfolio Panel Policy and reflects the Victorian eServices model.

<table>
<thead>
<tr>
<th>Key Service Category</th>
<th>Service Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>Project/Program/Portfolio Management</td>
</tr>
<tr>
<td></td>
<td>Quality Assurance/Compliance</td>
</tr>
<tr>
<td></td>
<td>Benchmarking/Function Point Analysis (FPA)</td>
</tr>
<tr>
<td>Strategy and Analysis</td>
<td>Strategy Development</td>
</tr>
<tr>
<td></td>
<td>Business Analysis</td>
</tr>
<tr>
<td>Architecture and Design</td>
<td>Enterprise Architecture</td>
</tr>
<tr>
<td></td>
<td>Business Architecture</td>
</tr>
<tr>
<td></td>
<td>Information Architecture</td>
</tr>
<tr>
<td></td>
<td>Application Architecture</td>
</tr>
<tr>
<td></td>
<td>Technology Architecture</td>
</tr>
<tr>
<td>Systems and Solutions</td>
<td>Design and Development</td>
</tr>
<tr>
<td></td>
<td>Integration/Implementation</td>
</tr>
<tr>
<td></td>
<td>Data Migration and Conversion</td>
</tr>
<tr>
<td></td>
<td>Testing</td>
</tr>
<tr>
<td></td>
<td>Performance and Metrics</td>
</tr>
<tr>
<td>Support</td>
<td>Maintenance and Support</td>
</tr>
<tr>
<td></td>
<td>Hosting</td>
</tr>
<tr>
<td>Training</td>
<td>Training Delivery</td>
</tr>
</tbody>
</table>
Project/Program/Portfolio Management

Project management is the application of knowledge, skills, tools and techniques for a range of activities to meet the requirements of a particular project including initiating, planning, executing, controlling and closing.

Program management combines the ability and resources to define, plan, implement, and integrate every aspect of a comprehensive program of work.

Portfolio management organises a series of projects into a single portfolio, consisting of reports that capture project objectives, costs, timelines, accomplishments, resources, risks and other critical factors.

Quality Assurance/Compliance

Quality Assurance (QA) includes the planned and systematic activities implemented in a system to fulfil the quality requirements for a product or service. Quality assurance also requires demonstrated QA methodologies and extensive experience in implementing QA programs to ISO 9000 standards. JASANZ Certification for Lead Auditors is preferred for nominated personnel.

Benchmarking/Function Point Analysis (FPA)

Benchmarking includes identifying accurate historical and/or current data against which a data set can be compared now and/or in the future. Demonstrated experience in the identification, adaptation and adoption of benchmarking processes is also required.

Function Point Analysis (FPA) requires a methodology to calculate the relative size of individual applications or subsystems to establish a meaningful unit-of-work measure, which can be used to establish baseline costs and performance level monitors to quantify the functionality (value) being delivered to the business user. Demonstrated experience is required in FPA measurement to determine any software deliverables in logical user-oriented terms either pre/during or post system delivery.

Strategy Development

Strategy development includes the provision of strategic vision and documentation associated with information and communications technology supporting IT in government. This includes, but is not limited to:

- strategy and plan development and evaluation
- forecasting or analysis of future trends
- strategic research and analysis
- development of and advice on management frameworks (e.g. risk, service delivery management and portfolio management).

Business Analysis

Business analysis includes structured identification, analysis and documentation of requirements associated with the design, development and implementation of business systems. This includes, but is not limited to:

- business requirements specification
- process analysis and design
- procedure development
• data migration and conversion planning
• development and execution of testing strategies
• problem identification and resolution
• assessment of training needs
• liaison between technical and business staff
• research and analysis (e.g. market and customer)
• risk assessment and management.

Architecture and Design

Enterprise Architecture

Enterprise architecture (EA) is both a process and a set of strategies that is used to develop enterprise models. The models define the business, the information and technologies needed to operate and support the business, and the transition necessary for implementing new technologies in response to changing business needs. EA services may include:

• planning, developing and implementing EA within complex organisational environments
• knowledge of current trends and developments relevant to EA
• implementing and understanding the critical role of governance in ensuring alignment between business objectives & IT strategy
• utilisation of tools, models and templates to support capture, analysis and presentation of findings to a wide range of stakeholders.

Business Architecture

Business architecture is a component of current and target architectures and relates to an organisation’s mission and goals. It contains the content of the business models and focuses on the organisations business areas and processes responding to business drivers. The business architecture defines high-level business processes, information flows and information needed to perform business functions.

• business architecture services may include: development of enterprise architectures (both for current state and future state) for the business architecture layer within complex organisational environments
• development of models for the business architecture to meet the diverse needs of business transformation and EA projects
• analysis of the relationships between business entities such as stakeholders, inputs, outputs, business functions, processes, metrics, organisation and skills and their relationships with the information they use and the systems they support
• utilisation of tools, models and templates to support capture, analyses and presentation of findings to a wide variety of stakeholders.

Information Architecture

Information architecture covers all the sources and forms of information that define the enterprise architecture. The information architecture Layer includes:
• information and data models
• processes for managing information
• standards for the manipulation and presentation of information
• governance of information
• infrastructure and technology for storing, manipulating and transmitting information
• taxonomy for categorisation of information.

Information architecture services may include:
• development of enterprise architectures (EA, both for current state and future state) for the information architecture layer within complex organisational environments
• development of models, standards and guidelines for the information architecture to meet the diverse needs of EA projects
• understanding the architectural capabilities and constraints of the range of technologies that support data and information in distributed systems
• information and data modelling, taxonomies and content descriptions,
• utilisation of tools, models and templates to support capture, analyses and presentation of findings to a wide variety of stakeholders.

Application Architecture

Application architecture is part of the enterprise architecture (EA). It covers the structure and organisation of the range of aspects of an application or the set of applications used by the enterprise.

The application architecture includes:
• the capabilities which together make up the application
• the relationship of the application to business functions, business processes and sets of data / information
• the organisation of the components within the application, such as presentation, business logic, business rule & workflow
• the way in which components or capabilities communicate with one another
• the way in which applications communicate with one another
• the organisation of the software within the application (software architecture)
• the relationship of the application to operating systems & middleware.

Application architecture services may include:
• development of EA (both for current state and future state) for the application architecture layer within complex organisational environments
• development of models, standards and guidelines for the application architecture to meet the diverse needs EA projects
• understanding of the architectural capabilities and constraints of the range of applications, capabilities, services and application technologies used in modern business
• utilisation of tools, models and templates to support capture, analyses and presentation of findings to a wide variety of stakeholders.

Technology Architecture

Technology architecture is a model that physically depicts the technical environment for an enterprise. It shows actual hardware, systems software and details of networks. Technology architecture services may include:

• development of enterprise architectures (EA, both for current state and future state) for the technology architecture layer within complex organisational environments
• development of models, standards and guidelines for the technology architecture to meet the diverse needs EA projects
• understanding the architectural capabilities and constraints of the range of applications, capabilities, services and application technologies used in modern business
• utilisation of tools, models and templates to support capture, analyses and presentation of findings to a wide variety of stakeholders.

Design and Development

Design and Development services include:

• software engineering and the development of software applications and services (as per SDLC including Business requirements specifications, Functional Specification, Systems, Infrastructure & Technical Design, Coding, Compilation, Testing, Deployment, Documentation, and Maintenance & Support) to Government or large/complex organisations
• understanding of emerging technologies and trends and how government may take advantage of such developments
• understanding of government IT standards, strategic directions and practices for application development, and technical and IT/environment requirements across a wide range of government clients.

Integration and Implementation

Integration refers to the process of combining parts so that they work together. In an information technology context, integration is the process in which separate components or subsystems are combined to function together seamlessly as one. It includes application integration, integration of server hardware and integration testing services.

Implementation refers to and encompasses all the processes involved in ensuring new software or hardware operates properly in its environment. It includes installation, configuration, running, testing, and making necessary changes.

Data Migration and Conversion

Data Migration in information technology is the process of moving data from the use of one operating environment to another operating environment including such services as integration, data management and quality. Data migration can be as simple as moving data from one storage device to another, or it may be more complex, requiring a conversion process if the format of the old and new databases differ.
Conversion is the process of changing software or information to make it relevant and correct in a new or different operating environment. This may include the extraction & transformation and loading of data from one operating platform to another.

Testing

Testing covers both software and hardware to determine that the product(s) are fit for purpose. This also encompasses the development of testing strategies and the configuration and use of automated test tools right through to the actual testing regime. Types of testing includes Unit Testing, Systems Testing, Regression Testing, Performance/Load Testing, Security/Risk testing, End to End Testing, Integration Testing, User Acceptance Testing, Conversion and Implementation Testing, Server and Software Compatibility testing, Server Configuration Testing and Sociability Testing.

Testing services may include:
- understanding the complete testing lifecycle from test case development right through to the configuration of test software, running of test cases and writing of test reports
- determining and delivering testing strategies for software projects
- conducting tests utilising manual methods and automated testing tools.

Performance and Metrics

Performance and metrics include the quantification of system usage, average response time, benefits achieved and other measures to determine if a software or hardware environment is performing at its peak and delivering the responses that are required by the user.

Maintenance and Support

Support and maintenance is defined as the ongoing services, which ensure that a system or application is available to users for the agreed periods and at agreed service levels. This service category includes the use of ITIL methodology for service desk management as well as robust systems of managing and tracking problems and issues. It also includes the utilisation of processes and procedures for problem / issue escalation.

Support services may include:
- problem and / or issue definition
- problem and / or issue resolution and rectification
- availability management and configuration management.

Maintenance services may include:
- minor changes / modifications to applications, systems or interfaces
- minor upgrades to applications, systems or interfaces and the installation and testing of patch releases.

(Note: Maintenance services specifically exclude major application enhancements, modifications, major upgrades, and releases. These services are covered within the Systems and Solutions Service Category).
Hosting

Hosting is defined as the provision of managed server services for a specified application or website according to agreed / defined standards. This service category includes the development and achievement of custom structured service level agreements.

Training Delivery

Training relates to providing government with IT training courses in metropolitan and regional areas for the nominated areas of specialties.

Training will be delivered via a combination of differing methods including:

- instructor led, seminar style to large groups
- training at departmental site or provider site
- interactive workshops, customised courses, modular course, train the trainer, computer based training, roaming trainer, e-learning training, in-house developed system and associated training programs and technically aligned training.

Training services include:

- guaranteed personnel availability
- flexibility and adaptability to the wide range of differing requirements across government; with a focus on keeping up to date with the latest technology, training tools and techniques available
- delivery of ICT industry accredited training courses, and
- delivery of training needs analysis, course design course delivery etc.

For example, the delivery of: MCSE, MCSD Training; Web Server Management; MS Networks; Cisco certification (CCNA); Netware V5 & 6; Citrix Metaframe; Certified Netware Administrator (CNA); International Computer Drivers Licence (ICDL); Certified Lotus Professional (CLP); Certified Lotus Specialist (CLS), ITIL, etc.