

Enterprise Architecture

Combining people, process, information and technology to meet business objectives

An Enterprise Architecture is a blueprint that defines the structure and operation of an organisation. The purpose of an Enterprise Architecture is to capture how an organisation can most effectively achieve its current and future objectives by defining how people, process, information and technology support business operations and capabilities.

Overview

Enterprise Architecture provides a framework to specify the organisation's core strategy and goals, each component critical to performing that objective, and how each of these components is interrelated. These enterprise components include:

- Guiding principles, policies, strategy and goals
- Organisation structure
- Business processes
- People and stakeholders
- Information flows and requirements
- Applications, data and infrastructure
- Technologies upon which networks, applications and systems are built

An Enterprise Architecture that is well documented and understood enables the organisation to respond quickly to changes and serves as a ready reference to enable impact assessment of changes on the enterprise components.

Enterprise Architecture in UK Defence

The UK Ministry of Defence has developed a standardised way of conducting Enterprise Architecture using a common framework called MODAF, the Ministry of Defence Architecture Framework, which provides a rigorous 'system of systems' approach when procuring and integrating defence systems.

MODAF enables Enterprise Architecture to be the means by which to model, understand, analyse and specify Capabilities, Systems, Systems of Systems, and Business Processes through architectural views that provide both a visual representation and a textual definition of different aspects of the business to support different stakeholder interests.

The views defined in MODAF cover the strategic goals of the enterprise, and the people, processes, information and systems that deliver those goals and include Capability Management, Defence Lines of Development and programmatic aspects such as project dependencies.



How do I optimise my IT resources while continuing to meet business requirements?

How do I determine the impact of a required business capability on the IT infrastructure and applications?

Do I have a clear roadmap of how the IT infrastructure will evolve to meet requirements of a growing business?

How will my IT infrastructure respond to business acquisitions, de-mergers or capability-based extended enterprises?

The MODAF views

To ensure coherence between the views, a MODAF compliant architecture is underpinned by a common library of all components across all the views.

Business Drivers

Enterprise architecture is a management tool that ultimately delivers value by enabling effective and efficient decision making based on a common accurate view of the enterprise. Implementing an Enterprise Architecture can provide many benefits, such as:

- Increased collaboration across multiple stakeholders, through precise, standardised communication about the essential elements and functioning of the enterprise
- Centralised, stable and consistent information about all aspects of the enterprise and all of its assets
- Faster response and greater flexibility in the face of change, making it easier for an organisation and its partners to manage changes as they occur
- Improved return on investment (ROI) on an organisation's various IT implementations, by ensuring that IT is aligned to business objectives
- Improving information quality by reducing the duplication and inconsistencies in the data
- More predictable results; when the information about an enterprise is more precise, higher quality decision making can be achieved with reduced risk.

LSC Group Enterprise Architecture Capabilities

Development of an Enterprise Architecture requires an understanding of an organisation's strategic goals and the interaction of people, process and technology to meet these goals.

LSC Group has the Defence domain understanding and technical knowledge to provide consultancy and support services to enable the best use of Enterprise Architecture to ensure that organisational and capability requirements are achieved with adherence and coherence to relevant UK MOD policy and standards.

LSC Group has a process of Enterprise Architecture analysis, resulting in an enterprise architecture deliverable that includes all key elements, namely:

- Architecture strategy, planning and delivery
- Establishing a single version of the truth about the enterprise
- Modelling the Enterprise, organisation processes and information flows
- Addressing all dimensions of the enterprise: business strategy, organisation, process, information and technology
- Defining multiple, perspective-dependent views: e.g. business versus technical, logical versus physical
- This approach to Enterprise Architecture provides a number of benefits to our customers:
- Enables an explicit, informed approach to enterprise management
- Establishes a single, universally understood view of business capabilities and services
- Identifies gaps in capabilities, services and governance
- Captures requirements and serves as the roadmap by which to move from "as is" to "to be"
- Provides a means to achieve consistency and coherence across organisation, process, information and technology

Why LSC Group?

We can do the analysis

Examples of Enterprise Architecture in support of our customers, include:

- Future carrier, strategy and pan-application approach for through-life logistics information architecture
- Oil Industry, enterprise-wide data model for application integration
- Maritime, Business Process modelling and simulation
- UK MOD Logistics Coherence Information Architecture, process modelling and information requirements across the MOD and industry enterprise

Strategic Views (StVs)

- define the desired business outcome, and what capabilities are required to achieve it

Operational Views (OVs)

- define (in abstract rather than physical terms) the processes, information and entities needed to fulfil the capability requirements

Service Oriented Views (SOVs)

- describe the services, (i.e. units of work supplied by providers to consumers), required to support the processes described in the operational Views

Systems Views (SVs)

- describe the physical implementation of the Operational and Service Orientated Views and, thereby, define the solution

Acquisition Views (AcVs)

- describe the dependencies and timelines of the projects that will deliver the solution

Technical Views (TVs)

- define the standards that are to be applied to the solution

All Views (AVs)

- provide a description and glossary of the contents of the architecture

Our analysis is robust and relevant

Enterprise applications delivered on the basis of our architectural analysis include:

- Collaborative Working Environments for MOD delivery teams
- Engineering data integration and delivery for naval through-life support
- Engineering and Asset Management for fleets of high-value items
- Toolsets to support the NATO Codification System