# Introduction

The TOGAF Standard provides a framework for addressing the complete architecture landscape of an enterprise. In addressing this complete landscape it deals with different timeframes, levels, scale and complexity. To tackle these effectively, the Standard identifies three broad perspectives from which the architecture landscape can be governed and evolved.

This document identifies these roles and the skills associated with them. This assists in the setting up and maintenance of an effective architecture practice.

It also provides a skills framework that offers a view of the competency levels required for specific roles, identifying:

* The skills required by each role.
* The depth of knowledge required for the skill to fulfil a role successfully.

Skills frameworks are used widely across many different roles in many enterprises providing a means of rapidly identifying skill matches and gaps. When successfully applied they can ensure that candidates are fit for the jobs, roles and tasks assigned to them.

# Architecture

Architecture is a well-known term, originally used in relation to the construction of buildings and the wider environment. The Merriam-Webster dictionary includes these phrases in their definition:

* the art or science of building,
* a unifying or coherent form or structure,
* [architectural](https://www.merriam-webster.com/dictionary/architectural) product or work, and
* the manner in which the components of a computer or computer system are organized and integrated.

From these phrases we can see that the term has more recently also been applied specifically to information systems, as their importance has grown. Architecture essentially understands shapes, specifies and governs. It provides the basis upon which components are created or changed and integrated into sub-systems and systems delivering the services associated with an enterprise.

The ISO/IEC/IEEE 42010:2011 defines "architecture" as:

*"The fundamental concepts or properties of a system in its environment embodied in its elements, relationships, and in the principles of its design and evolution."*

The TOGAF standard embraces but does not strictly adhere to ISO/IEC/IEEE 42010:2011 terminology. In addition to the ISO/IEC/IEEE 42010:2011 definition of "architecture", the TOGAF standard defines a second meaning depending upon the context:

*"The structure of components, their inter-relationships, and the principles and guidelines governing their design and evolution over time."*

The TOGAF standard considers the enterprise as a system and endeavours to strike a balance between promoting the concepts and terminology drawn from relevant standards, and commonly accepted terminology that is familiar to the majority of those using TOGAF.

In bringing these concepts together the TOGAF Standard addresses the complete scope of an enterprise’s architecture landscape, including all of the components and their creation, organisation, governance and evolution. It provides three main viewpoints from which to manage this.

* A complete **enterprise** and its overall structure.
* Specific **segments** (relevant elements) of the enterprise that have coherence and can be governed and evolved effectively.
* Specific **solutions** that utilise the components within the segments to remove, change or introduce new solutions and their associated sub-systems, systems and services.

This provides the guidance and oversight of the creation, implementation and operation of the elements within an enterprise, but it does not describe how to actually build, deploy and run the systems and services. That is the job of the relevant business, technical and service management professionals. The TOGAF Standard refers to these other roles and how they must collaborate with the architecture roles, but leaves the detail of these roles to the relevant professionals and associations that provide leadership for those roles and skills.

In this manner the TOGAF Standard provides an approach for dealing with all levels of architecture and executing the main roles needed to deliver a constantly evolving architecture landscape that satisfies an enterprise’s goals and objectives and its specific requirements.

# **Architecture Roles and Skills The Basis of an Enterprise Architecture Practice**

Once the overall concepts of enterprise architecture and the architecture roles are understood it is relatively easy to organise the beginnings of such a practice. This document provides the information about those roles and skills that are used to organise the architecture practice and manage it over time.

As is the case in all of the TOGAF Standard, the Standard does not mandate how to do this and expects that there will be considerable customisation and organisational alignment when applied to each specific circumstance. The TOGAF Standard is descriptive, not prescriptive, and provides an illustrative approach that can be used to underpin the management of an enterprise’s architecture landscape. In some cases the illustrated approach or model will be adopted directly, in others it may be significantly changed. When doing so bear in mind that the TOGAF Standard illustrations are based on a long running accumulation of best practices that are constantly being evaluated against the latest changes in our business and technology environment.

*(Note that: when establishing and architecture practice the more difficult aspect is often justifying, explaining and integrating the practice to and with other parts of the enterprise. Those issues are not addressed in this document but are addressed in Open Group Documents on the setting up and establishment of an architecture practice.)*

In order to set up an effective architecture practice there is a need to:

* Have a clear mandate from the appropriate relevant stakeholders (this will vary from organisation to organisation).
* Identify and define needed architectural competencies, while aligning necessary staff roles, skills and experience with the architecture tasks the enterprise needs to be performed, whether these are to be performed internally to the enterprise or externally; for example, as part of a consultancy engagement.
* Formally recognize the skills and capabilities of architects, as part of the task of establishing and maintaining a professional architecture organization.
* Provide a competency development path for architects to ensure a minimal competency levels and provide confidence that the architecture activities performed by those certified meets an acceptable level.

A well-defined set of the roles and skills enables you to:

* Simplify communication between recruiting organizations, consultancies, and employment agencies.
* Provide criteria for consistent decisions about the development and assignment of architects.
* Avoid wasting time assessing candidates who may have applied in all good faith, but still lack the skills and/or experience required by the employer.
* Identify staff who are capable of filling architecture roles and might otherwise be overlooked.
* Enable employees to self-assess against a set of required skills to prepare their own training and career plans, supported by mentoring where appropriate.
* Assess levels of talent and where investments in training should be made, based on common skill gaps.
* Create a stable base of future architects and nurture them by mentoring with a well-defined path.
* Create a stable base of future architects and allow determination of those close to being ready to enable application of limited mentoring resources.
* Provide a career path for aspiring architects, increasing employee satisfaction and improving employee retention.

By providing definitions for the architecting skills and proficiency levels for the various architecting roles defined within the TOGAF Standard, an architecture skills framework greatly reduces the time, cost, and risk of setting up a practice for the first time, and avoids "re-inventing the wheel". Enterprises that already have an enterprise architecture practice are able to set enterprise-wide norms and find it easier to recruit staff, or engage consultants, from external sources.

# Architecture Roles

The TOGAF Standard provides an example set of roles that are valuable in the evolution and governance of the architecture landscape of an enterprise. They support effective decision making at different levels of impact and influence. The three main viewpoints of enterprise, segment and solution were introduced earlier. These are shown in Figure1 together with some additional ones that are introduced below.



**Figure 1 Architecture Roles and their Relationships**

The Chief Architect is a special case of an enterprise architect and is responsible for integrating the enterprise architecture view into the wider strategic and operational context of the enterprise. The main context of the role is political and collaborative, persuasive and strategic It strives to ensure that the business understands the importance of a well understood and governed architecture and how it improves business operation and change.

Other Specialist roles work at a more detailed level within segments (business and/or technically focused) taking leadership from the Segment Architects and adding the detailed knowledge and expertise to create, evolve, implement and integrate the various components, sub-systems, systems, and services provided and overseen by a segment. Solution architects implement new and/or changed solutions satisfying specific requirements and informed by the superior architectures identified at the enterprise and segment levels.

The Users and Stakeholders represent the other roles working in and/or influencing business or technology within the enterprise. Change to services and solutions are usually targeted at those roles responding to specific requirements that they have identified.

The TOGAF Standard does not give you specific details on the Specialist and User and Stakeholder roles. These can be found in the many different professional frameworks and associations that exist for those roles.

Figure 1 shows the three main architecture roles (supplemented by the special case of the Chief Architect) in the central vertical relationship. Moving down from Chief Architect, through Enterprise Architect to Segment Architect there is greater detail in the understanding, leadership and governance of the specific elements in the architecture landscape, enabling properly levelled decision making. Most organisations have a set of levels for management and control ranging from 3 to 7 levels. It is common for enterprises to try to minimise the number of these levels. The TOGAF Standard provides a model with the minimum 3 levels of differentiation, from which you can grow your model should you need to address more levels of shaping and governance. The roles are described in more detail below.

## Chief Architect

The Chief Architect is a very experienced and accomplished professional responsible for communicating and gaining commitment for significant technical and business change, and performance improvement across all of an enterprise and its marketplace (whether as an internal employee or external consultant / resource).

They work at the most senior levels creating a consensus among executives and board members about the nature and need for an effective architecture landscape. They communicate the latest business and technical concepts and ideas in a manner that can be understood by all executives and their direct reports, and can be clearly related to, and integrated, with the enterprise’s strategic and operational goals and objectives.

They operate effectively when the situations encountered are dynamic, evolving, and /or novel in complexity, scope or solution. They promote and champion roadmaps for change across multiple domains, shape the structure and evolution of the architecture landscape and have ultimate accountability for, and oversight of, the architecture landscape, its impact on the delivery of business services, and its governance.

Their prime responsibility is to create the conditions for effective responses to the strategic change desired by an enterprise. They lead enterprise architects, segment architects, solution architects and various specialists to create, implement and operate the services and solutions needed to keep an enterprise operating effectively in its evolving marketplace.

**Activities may include, but are not limited to:**

* Supporting and contributing to the development of business strategy.
* Translating business and technology strategies, goals and objectives into related changes in the operating model.
* Assessing current capabilities and identifying required changes in those capabilities to achieve business and technology strategies, goals and objectives.
* Communicating and collaborating through multiple channels and mechanisms with enterprise leadership to ensure that they understand and are up to date with the architecture roadmap.
* Leading on and providing the overall context and shape of the architecture landscape, ensuring that the architectural models and views embody key goals, objectives and principles and describe the organisation's future state to enable its successful evolution. In most cases they are leading others and providing decisions about the overall landscape, as EA leaders or EA practitioners.
* Being responsible for the largest, most complex and risky changes about evolution the architecture landscape and the related solutions and services.
* Identifying, documenting and communicating the major constraints, principles and policies.
* Developing, enabling and supporting the enterprise, segment and solution architects working within the architecture team through leadership, mentoring and coaching.
* Providing awareness of relevant change drivers to the enterprise and overseeing the governance activities associated with the changing architecture landscape.

**Key Stakeholders may include, but are not limited to:**

* Executive leaders and board members
* Senior Business Leaders
* Senior Customer/User Representatives
* Business Segment Leaders
* Product Owners & Managers
* Change Managers
* Programme and Project Managers
* Segment Architects
* Solution Architects
* Business & Technical Specialists
* Relevant Segment Industry Leaders
* Any other stakeholders with an interest in the enterprise architecture and the delivery of effective solutions and services (including all relevant user types).

**Potential KPIs To Measure Success:**

* Stakeholder satisfaction score => 3 out of 5 (scale 1 = poor 5 = excellent - target score average or above).
* Services delivering and accepted at or better than planned service levels.
* The enterprise externally benchmarked as in the (xxx) quartile for technology use.
* Externally benchmarked as in the (xxx) quartile for comparative similar scale in year market development.
* New and changed solutions are delivered and signed off within agreed time, resource and cost boundaries (boundaries must be properly set to reflect the potential variation relevant to a specific change).

## Enterprise Architect

Enterprise Architects are very experienced and accomplished professionals responsible for creating, leading and delivering significant technical and business change across all of an enterprise and into the marketplace.

They initiate, drive and own major pieces of work, interfacing at the most senior levels with accountability for overall business service delivery through information systems demonstrate mastery in several key technical and/or business areas. They have a track record of significant delivery, have created strong working relationships with key stakeholders and will coach and mentor others.

They operate effectively when the situations encountered are dynamic, evolving, and /or novel in complexity, scope or solution compared to those encountered before and where the situation and scope is not limited to any particular solution aspect or segment (e.g. not limited to a specific part of the requirements / analysis / design / delivery lifecycle, a specific market, or a single product or technology). They create roadmaps for change across multiple segments, define principles and policies to shape the architecture landscape, and oversee the governance process for architectural change.

Their prime responsibility is to create and evolve the conditions for the integration, interoperability and governance of solution components, leading segment architects, solution architects and various specialists to create, implement and operate the services and solutions needed to keep their enterprise as an effective player in its evolving marketplace.

**Activities may include, but are not limited to:**

* Translating business and technology strategies and objectives into related changes in the operating model.
* Assessing current capabilities and identifying required changes in those capabilities to achieve business and technology strategies and objectives.
* Describing the interrelationships (between people, organisation, service, process, data, information, technology and the external environment) needed to enable the delivery of effective products and services.
* Creating and evolving architectural models and views embodying the key principles that describe the enterprise’s future state, and that enable its successful evolution across the architecture landscape.
* Defining, communicating, and implementing enterprise architecture working practices to support and enable iterative and agile working.
* Identifying, documenting and communicating the constraints, principles and policies necessary to define, assure and govern the effective evolution of the architecture landscape (its environment of services implemented in its various components).
* Developing, leading, enabling and supporting the segment and solution architects working within the architecture team through leadership, mentoring and coaching.
* Providing awareness of relevant change drivers to the enterprise and participating in the governance activities associated with the changing architecture landscape.

**Key Stakeholders may include, but are not limited to:**

* Chief Architect
* Business Segment Leader
* Customer/User Representatives
* Product Owners & Managers
* Change Managers
* Programme and Project Managers
* Segment Architects
* Solution Architects
* Business & Technical Specialists
* Relevant Segment Industry Leaders
* Any other stakeholders with an interest in the enterprise architecture and the delivery of effective solutions and services (including all relevant user types).

**Potential KPIs To Measure Success:**

* Stakeholder satisfaction score => 3 out of 5 (scale 1 = poor 5 = excellent - target score average or above).
* Services delivering and accepted at or better than planned service levels.
* The enterprise externally benchmarked as in the (xxx) quartile for technology use.
* New and changed solutions are delivered and signed off within agreed time, resource and cost boundaries (boundaries must be properly set to reflect the potential variation relevant to a specific change).

## Segment Architect (Business and Technical)

*(A segment is a coherent grouping of capabilities for management and control purposes, usually managed as portfolio of capabilities or a specific programme of change. The TOGAF Standard also uses the concept of a domain. A domain is used to reflect any useful grouping of capabilities to be manged by an enterprise; with four particular IS/IT related segment based viewpoints that are useful in managing an architecture landscape that includes information systems. These four particular segments are called the business, application, data and technology domains (often referenced with the acronym BDAT).*



**Figure 2 – Entity Relationship Diagram for Architecture Level Concepts**

Segment Architects are experienced and accomplished professionals responsible for the capabilities provided by one or more business or technical segments within an enterprise and its marketplace.

They shape and govern the systems, sub-systems and components needed to implement products and services from those domains. They develop roadmaps for segment evolution and ensure that the latest business and technical options are considered and effectively exploited. They identify the policies and standards needed to ensure that the components from the segment(s), are effective, efficient and legal. They collaborate effectively and easily with other architects ensuring that the overall environment can operate in a well-connected manner.

They operate effectively when the situations encountered are dynamic, evolving, or novel in complexity, scope or solution compared to those encountered before. They oversee all development of the systems, sub-systems and components related to a segment(s), ensuring that they are fit for purpose, legal and follow the required policies and standards.

Their prime responsibility is to create the conditions for the creation, integration, interoperability and evolution of the systems, sub-systems and components within a segment(s), ensuring that the technical/business specialists and solution architects are clear about their roles, understand how to work together effectively, and deliver the components and building blocks that achieve the end to end business service levels required by an enterprise and its clients.

**Activities may include, but are not limited to:**

* Translating business and technology strategies and objectives into related changes in the relevant business and/or technical segment.
* Assessing current capabilities and identifying required changes in capabilities to achieve business and technology strategies and objectives in the relevant business and/or technical segment.
* Describing the interrelationships (between people, organisation, service, process, data, information, technology and the external environment) needed to enable the delivery of effective products and services in the relevant business and/or technical segment.
* Creating, iterating, and maintaining architectural models and views embodying the key principles that describe the organisation's future state, and that enable its successful evolution in the relevant business and/or technical segment.
* Implementing architecture working practices to support and enable iterative and agile working in the relevant business and/or technical segment.
* Identifying, documenting and communicating the constraints, policies and standards necessary to define, assure and govern the effective evolution of an architecture landscape (its environment of services implemented in its various building blocks) in the relevant business and/or technical segment.
* Developing, leading, enabling and supporting the technical/business specialists and solution architects working within the architecture team in the relevant business and/or technical segment through leadership, mentoring and coaching.

**Key Stakeholders may include, but are not limited to:**

* Chief Architect
* Relevant Business Segment Leaders
* Customer/User Representatives
* Relevant Business Operators
* Relevant Product Owners & Managers
* Change Managers
* Programme and Project Managers
* Enterprise Architects
* Segment Architects
* Solution Architects
* Relevant Business & Technical Specialists
* Relevant Segment Industry Leaders
* Any other stakeholders with an interest in the enterprise architecture and the delivery of effective solutions and services (including all relevant user types).

**Potential KPIs To Measure Success:**

* Stakeholder satisfaction score => 3 out of 5 (scale 1 = poor 5 = excellent - target score average or above).
* Services (related to the elements overseen by a segment(s)) delivering and accepted at or better than planned service levels.
* The segment(s) is externally benchmarked as in the (xxx) quartile for business/technology capability and architecture in the relevant market segment.
* New and changed solutions are delivered and signed off within agreed time, resource and cost boundaries (boundaries must be properly set to reflect the potential variation relevant to a specific change).

## Solution Architect

Solution Architects are experienced and accomplished professionals responsible for the delivery of new and/or changed capabilities into an enterprise and its marketplace.

They shape and govern the solutions needed based on specific requirements (that also implement the higher level goals and objectives), delivering specified service levels within aspirational time frames.

They specify the systems, sub-systems and components needed for a solution, their interoperability and place them in a consolidated roadmap of change, delivering the required evolution through a series of implementable transition architectures (value driven deliverable units of work). They ensure that the latest business and technical options are considered and effectively exploited.

They operate effectively when the situations encountered are dynamic, evolving, or novel in complexity, scope or solution compared to those encountered before. They oversee all specification, development and implementation of new and changing solutions, ensuring that relevant, principles, policies and standards are applied to solutions and that the solutions are fit for purpose, effective, efficient and legal.

Their prime responsibility is to create the collaborative conditions for the specification, creation, integration and interoperability of a solution, ensuring that the technical/business specialists, implementers and operators are clear about their roles, understand how to work together effectively and can deliver the systems, sub-systems and components that achieve the end to end business service levels expected. This understanding is based on the solution architect fully engaging with all business/technology and other stakeholders to fully understand their concerns, requirements and expectations.

**Activities may include, but are not limited to:**

* Specifying changes to services, processes, organisation structure and operating models as well as technology, including the planned operation, maintenance and evolution of the solution within a production environment.
* Ensuring that existing and planned solution components are compatible with relevant architectures, strategies, policies, standards and practices.
* Taking full account of the requirements for security, privacy and testing of solutions
* Clearly identifying the benefits and issues associated different solution topologies (such as with on-premise and off-premise solutions and services), systems, sub-systems and components for each change being specified and implemented.
* Creating, evolving and ensuring the implementation of the target architecture roadmaps, for each major product and/or service change and its constituent transition architectures.
* Providing guidance and risk-based governance to support solution implementation, including managing requests for changes and any necessary deviations from specifications.
* Ensuring that all stakeholders can communicate and collaborate effectively to deliver the targeted solutions and services and their expected service levels.

**Key Stakeholders may include, but are not limited to:**

* Enterprise Architects
* Relevant Business Segment Leaders
* Senior Customer/User Representatives
* Relevant Business Operators
* Relevant Product Owners & Managers
* Change Managers
* Programme and Project Managers
* Segment Architects
* Solution Architects
* Relevant Business & Technical Specialists
* Relevant Domain Industry Leaders
* Any other stakeholders with an interest in the enterprise architecture and the delivery of effective solutions and services (including all relevant user types).

**Potential KPIs To Measure Success:**

* Stakeholder satisfaction score => 3 out of 5 (scale 1 = poor 5 = excellent - target score average or above).
* Service changes delivering and accepted at or better than planned service levels for the targeted solutions.
* Solutions are delivered and signed off within agreed time, resource and cost boundaries (boundaries must be properly set to reflect the potential variation relevant to a specific change).

# Skills And Proficiency Levels

The architecture team skill set will need to include the following main categories of skills:

* Application
* Architecture
* Business
* Change
* Data
* Generic
* Legal
* Technology

Table 1 shows the proficiency levels. Table 2 shows the proficiency levels associated with the categories of skill and architect roles.

|  |  |  |
| --- | --- | --- |
| 1 | Background | Some understanding but reliant on specialists |
| 2 | Aware | Understands and can address issues with the support of specialists |
| 3 | Knowledgeable | Good detail enabling effective decision making requiring specialist input in difficult situations |
| 4 | Expert | Extensive experience, practical and applied knowledge |

**Table1: Proficiency Levels**

|  |  | **Enterprise Architect** | **Business Domain Architect** | **Data Domain Architect** | **Application Domain Architect** | **Technology Domain Architect** | **Solution Architect** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Application** | AI & Expert Systems | 3 | 3 | 3 | 3 | 2 | 2 |
| **Application** | Application Development | 3 | 2 | 2 | 3 | 2 | 3 |
| **Application** | Application Modelling | 3 | 2 | 2 | 3 | 2 | 2 |
| **Application** | Application Security | 3 | 2 | 2 | 3 | 3 | 3 |
| **Application** | Integration & Interoperability | 3 | 2 | 3 | 4 | 3 | 4 |
| **Application** | Optimistic / Pessimistic Patterns | 4 | 3 | 4 | 4 | 3 | 4 |
| **Application** | Programming | 3 | 2 | 2 | 3 | 2 | 2 |
| **Application** | (Micro/Macro) Service Oriented Architecture | 4 | 3 | 2 | 4 | 2 | 4 |
| **Business** | Budget Management | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Business Capability Modelling | 3 | 4 | 2 | 2 | 2 | 3 |
| **Business** | Business Case | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Business Culture | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Business Information Management | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Business Metrics | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Business Process Design | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Business Process Management | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Business Scenario | 3 | 3 | 2 | 2 | 2 | 3 |
| **Business** | Business Service Development | 3 | 4 | 2 | 2 | 2 | 2 |
| **Business** | Integration & Sharing | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Legacy Management | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Organisation Design | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Role Design | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Security & Asset Management | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Strategic Planning | 3 | 3 | 2 | 2 | 2 | 2 |
| **Business** | Visioning | 3 | 3 | 3 | 3 | 3 | 3 |
| **Change** | Managing Change | 3 | 3 | 3 | 3 | 3 | 3 |
| **Change** | Value Management | 3 | 3 | 3 | 3 | 3 | 3 |
| **Change** | Work Package Management | 3 | 3 | 3 | 3 | 3 | 3 |
| **Change** | Governance of Change | 3 | 3 | 3 | 3 | 3 | 3 |
| **Data** | Analytical Data | 3 | 2 | 3 | 2 | 2 | 2 |
| **Data** | Big Data | 3 | 2 | 3 | 2 | 2 | 2 |
| **Data** | Data Governance | 3 | 2 | 4 | 2 | 2 | 2 |
| **Data** | Data Integration | 3 | 2 | 4 | 3 | 3 | 3 |
| **Data** | Data Migration | 3 | 2 | 4 | 2 | 2 | 3 |
| **Data** | Data Modelling | 3 | 2 | 3 | 2 | 2 | 2 |
| **Data** | Data Security | 3 | 3 | 4 | 3 | 3 | 3 |
| **Data** | Master Data Management | 3 | 3 | 4 | 3 | 3 | 3 |
| **Data** | Operational Data | 3 | 2 | 3 | 2 | 2 | 2 |
| **Architecture** | Broad and Focused Perspective | 4 | 3 | 3 | 3 | 3 | 3 |
| **Architecture** | Broad Generic Modelling | 4 | 3 | 3 | 3 | 3 | 3 |
| **Architecture** | Decision Making | 4 | 3 | 3 | 3 | 3 | 4 |
| **Architecture** | Generic Integration & Interoperability | 4 | 3 | 3 | 3 | 3 | 3 |
| **Architecture** | Generic Standards & Regulations | 4 | 3 | 3 | 3 | 3 | 2 |
| **Architecture** | Principle Definition | 4 | 3 | 3 | 3 | 3 | 2 |
| **Architecture** | Road mapping | 4 | 3 | 3 | 3 | 3 | 3 |
| **Architecture** | Strategy Into Architecture | 4 | 3 | 3 | 3 | 3 | 2 |
| **Architecture** | Viewpoints and Views | 4 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Influencing | 4 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Inter-personal | 4 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Leadership | 4 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Logical Analysis | 3 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Oral Communication | 3 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Risk Management | 3 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Stakeholder Management | 3 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Teamwork | 4 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Training | 3 | 3 | 3 | 3 | 3 | 3 |
| **Generic** | Written Communication | 3 | 3 | 3 | 3 | 3 | 3 |
| **Technology** | Data Centre | 2 | 2 | 2 | 2 | 4 | 4 |
| **Technology** | Device | 2 | 2 | 2 | 2 | 4 | 2 |
| **Technology** | Integration & Interoperability | 3 | 2 | 2 | 2 | 4 | 2 |
| **Technology** | Location, Security & Directory Services | 2 | 2 | 2 | 2 | 3 | 2 |
| **Technology** | Network Topology | 3 | 2 | 2 | 2 | 3 | 2 |
| **Technology** | Networks | 2 | 2 | 2 | 2 | 4 | 2 |
| **Technology** | Operating Systems & Services | 2 | 2 | 2 | 2 | 3 | 2 |
| **Technology** | Physical Security | 3 | 2 | 2 | 2 | 3 | 2 |
| **Legal** | Contracts | 3 | 3 | 3 | 3 | 3 | 3 |
| **Legal** | Data Protection | 3 | 3 | 4 | 3 | 3 | 3 |
| **Legal** | Fraud & Fair dealing | 3 | 3 | 3 | 3 | 3 | 3 |
| **Legal** | Procurement | 2 | 2 | 2 | 2 | 2 | 3 |
| **Legal** | Risk | 3 | 3 | 3 | 3 | 3 | 3 |
| **Legal** | Rules & Regulations | 3 | 3 | 3 | 3 | 3 | 3 |
| **Total** |  | 222 | 194 | 190 | 185 | 189 | 186 |
| **Mean** |  | 3.13 | 2.7 | 2.7 | 2.6 | 2.6 | 2.6 |
| **No of level 4s** |  | 15 | 2 | 7 | 3 | 4 | 5 |
| **No of level 3s** |  | 50 | 48 | 34 | 37 | 39 | 34 |
| **No of level 2s** |  | 6 | 21 | 30 | 31 | 28 | 32 |
| **No of level 1s** |  | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total No of Skills** |  | 71 | 71 | 71 | 71 | 71 | 71 |

**Table 2: Skill / Architecture Role Matrix**

# Summary

The architecture roles, skills and proficiency levels enable better and easier creation and operation of an architecture practice and improved understanding and effectiveness of the architects within the wider business environment.

This model/shape is a recommended starting point for developing the approach that will best fit a specific enterprise(s). Make sure that you shape and customise it to your specific needs to gain the best outcomes and on-going effectiveness.