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(SIAM® FOUNDATION BOK)

Claire Agutter a.o.

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Service Integration and Management (SIAM®) Foundation Body of Knowledge

Claire Agutter a.o.

Colophon

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Preface

Organizations are finding that the sourcing environment is becoming more and more complex. They have moved away from a model where they had outsourced contracts with a single supplier to a model that has specialist service providers – and many of them. This makes supplier management (both internal and external) a challenge in an environment that has to deliver cross-functional, cross-process and cross-provider integration.

Service integration and management (SIAM) has evolved as a result of these challenges. However, many organizations have struggled to truly understand the SIAM approach and adopt it in order to get maximum value from their suppliers.

I have witnessed many organizations realize that they need to have a revised approach to service delivery with effective provision of governance, management, integration, assurance and coordination, but failing to successfully act upon that realization. Exacerbating the situation has been the lack of a single reference point and comprehensive guidance.

The SIAM Body of Knowledge has drawn on the experiences of many organizations and industry experts to create a basic set of SIAM principles from which all sizes and types of organizations can benefit.

I salute the contributors for undertaking this challenge and the tremendous results they have produced. This publication clarifies what SIAM is and its history. The SIAM roadmap clearly sets out the steps that organizations need to follow to effectively adopt a SIAM model. A significant help to organizations on this journey will be the description of the various SIAM structures, when to use each structure and the advantages and disadvantages of each, contained within the BoK.

The publication goes beyond the 'walls' of SIAM to discuss its integration with other practices such as DevOps, Agile, Lean and many more. As an organizational change management zealot, I was pleased to see that SIAM cultural considerations have also been included.

The many challenges that organizations have faced, or will face, such as dealing with legacy contracts, commercial issues, security, cultural fit and behaviors, control and ownership, have all been directly addressed in the BoK.

I recommend this book to every organization considering or already implementing a SIAM model, and I know many would wish they had it in their possession some time ago.

I also recommend this publication for anyone taking the SIAM® Foundation course and exam. It will be an invaluable reference source.

Karen Ferris, Director of Macanta Consulting

Karen Ferris is an internationally acclaimed service management and organizational change management professional with a reputation for providing both strategic and practical advice, assistance and insights for organizations in their implementation and maintenance of efficient and effective business and service management.

She is an author and sought after international speaker. In 2014 she was awarded the lifetime achievement award from itSMF Australia for her contribution to the industry. In 2017 she was voted (by the public) as one of the top 25 thought leaders for technical support and service management in a HDI poll.

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Document Purpose

This document introduces service integration and management (SIAM). Its contents are the source material for the EXIN BCS Service Integration and Management Foundation (SIAM®F) certification.

1. Introduction to Service Integration and Management (SIAM)

1.1. What is SIAM?

Service integration and management (SIAM) is a management methodology that can be applied in an environment that includes services sourced from a number of service providers.

SIAM has a different level of focus to traditional multi-sourced ecosystems with one customer and multiple suppliers. It provides governance, management, integration, assurance, and coordination to ensure that the customer organization gets maximum value from its service providers.

SIAM governance operates at three levels in the ecosystem:

- Strategic
- Tactical
- Operational.

SIAM is an evolution of how to apply a framework for integrated service management across multiple service providers. It has developed as organizations have moved away from outsourced contracts with a single supplier to an environment with multiple service providers. SIAM has evolved from the challenges associated with these more complex operating models.

SIAM supports cross-functional, cross-process, and cross-provider integration. It creates an environment where all parties:

- Know their role, responsibilities and context in the ecosystem
- Are empowered to deliver
- Are held accountable for the outcomes they are required to deliver.

SIAM introduces the concept of a service integrator, which is a single, logical entity held accountable for the end to end delivery of services and the business value that the customer receives.

Terminology

SIAM is the generally accepted acronym for service integration and management.

Other acronyms that are in use are:

- MSI (Multi Sourcing Integration)
- SMI (Service Management Integration)
- SI (Service Integration)
- SMAI (Service Management and Integration)
- SI&M (Service Integration & Management).

SIAM can be applied to different sizes and types of organization, and to different industry sectors. Customers that only require a single service provider are unlikely to get the full value from SIAM.

SIAM can be applied to environments that include external service providers only, internal service providers only, or a combination of internal and external service providers. The effectiveness of SIAM and the value it delivers will increase as the number of service providers and the number of interactions between services increase.

Some organizational cultures are more able to adapt to SIAM than others. Effective SIAM requires control to be balanced with trust, devolution of responsibilities, openness, and collaboration across all parties. A transition to SIAM is likely to require significant changes in attitude, behaviour, and culture in ecosystems that previously relied on command and control structures for effective service delivery.

The SIAM methodology encompasses:

- Practices
- Processes
- Functions
- Roles
- Structural elements.

The customer organization will transition to a SIAM model developed from these elements.

1.1.1. The SIAM Ecosystem

There are three layers in a SIAM ecosystem:

1. Customer organization (including retained capabilities)
2. Service integrator
3. Service provider(s).

Each layer has a role as part of effective end to end management of services and the delivery of maximum value. Each layer should have sufficient capability and maturity to fulfil its role.

1.1.1.1. Customer Organization

The customer organization is the end client that is making the transition to SIAM as part of its operating model. It commissions the SIAM ecosystem.

Customer organizations typically contain business units such as human resources, finance, sales, and their own internal IT function. They also have their own customers who use their products and services.

Figure 1 shows the layers of the SIAM ecosystem, and the consumers of services from the customer organization.

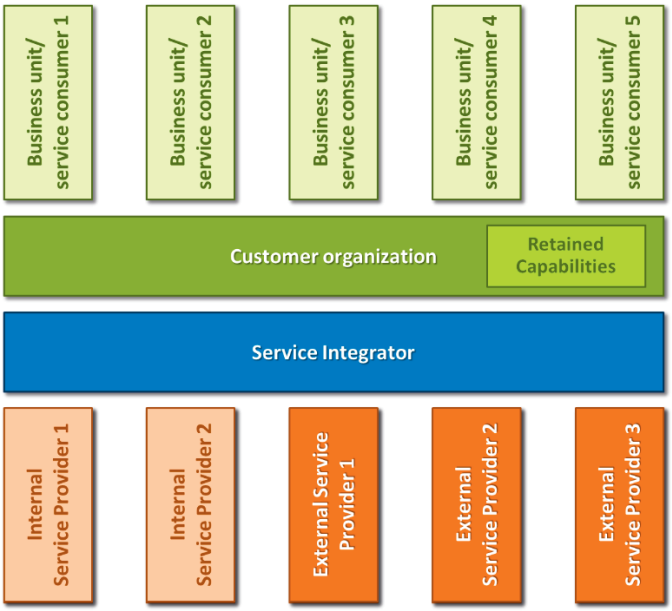

Figure 1 The SIAM layers, including consumers of services from the customer organization

In this document, we use the terms 'customer organization' and 'customer' to mean the commissioning organization.

The customer organization will own the contractual relationships with external service providers, and with any external service integrator.

1.1.1.2. Retained Capabilities

The customer organization will include some retained capabilities. The retained capabilities are the functions that are responsible for strategic, architectural, business engagement and corporate governance activities.

These business-differentiating functions typically remain under the direct control and ownership of the customer organization. Retained capabilities also include any accountabilities and responsibilities that must remain with the customer for legislative or regulatory reasons.

Examples of possible retained capabilities are:

- Enterprise architecture
- Policy and standards management
- Procurement
- Contract management
- Demand management
- Financial and commercial management
- Service portfolio management
- Corporate risk management
- Governance of the service integrator; based on achievement of business outcomes.

The service integrator is independent from the retained capabilities, even if it is internally sourced. Service integration is not a retained capability.

Retained capabilities are sometimes referred to as the 'intelligent client function'.

1.1.1.3. Service Integrator

The service integrator layer of the SIAM ecosystem is where end to end service governance, management, integration, assurance and coordination is performed.

The service integrator layer focuses on implementing an effective cross-service provider organization, making sure that all service providers are contributing to the end to end service. It provides operational governance over the service providers and has a direct relationship with the customer organization and the service providers.

The service integrator layer can be provided by one or more organizations, including the customer organization. If the service integrator layer is provided by more than one organization, it should still be considered as a single logical service integrator.

The service integrator can include one team of people or multiple teams.

1.1.1.4. Service Provider

Within a SIAM ecosystem, there are multiple service providers. Each service provider is responsible for the delivery of one or more services, or service elements, to the customer. It is responsible for managing the products and technology used to deliver its contracted or agreed services, and operating its own processes.

Service providers within a SIAM ecosystem are sometimes referred to as 'towers'. This term implies isolation and a monolithic approach, so the term 'service provider' is used as standard in this document.

Service providers can be part of the customer organization or external to it.

- An external service provider is an organization that is not part of the customer organization. Its performance is typically managed using service level agreements and a contract with the customer organization

- An internal service provider is a team or department that is part of the customer organization. Its performance is typically managed using internal agreements and targets.

Examples of services provided by service providers in a SIAM model include:

- Desktop services/end user computing
- Data centre
- Hosting
- Security
- Network/LAN/WAN
- Cloud services
- Printing services
- Voice and video (VVI)
- Application development, support and maintenance
- Managed services.

If the customer retains its own internal IT capability, this should be treated as an internal service provider, governed by the service integrator.

Service Provider Categories

It can be helpful to categorize service providers in a SIAM ecosystem, to help define their importance to the customer organization and the approach to governing and assuring their services.

There are three common categories of service provider in a SIAM ecosystem:

- Strategic service provider
- Tactical service provider
- Commodity service provider.

SIAM is applied to all three categories, but the nature of the relationship and the amount of management required will be different.

Figure 2 shows a high-level view of the SIAM layers.

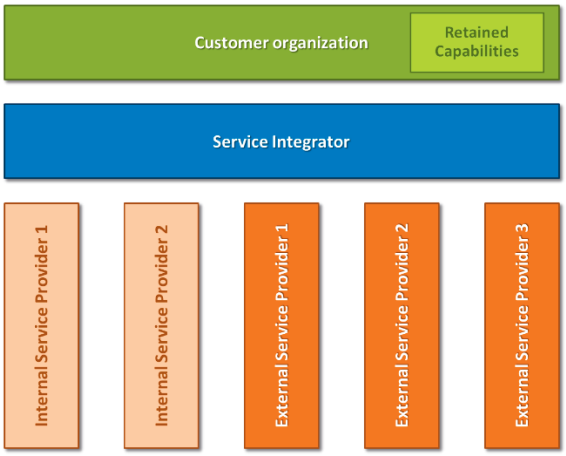

Figure 2 The SIAM layers

The focus, activities and responsibilities of each layer are different. Figure 3 provides an illustration of this.

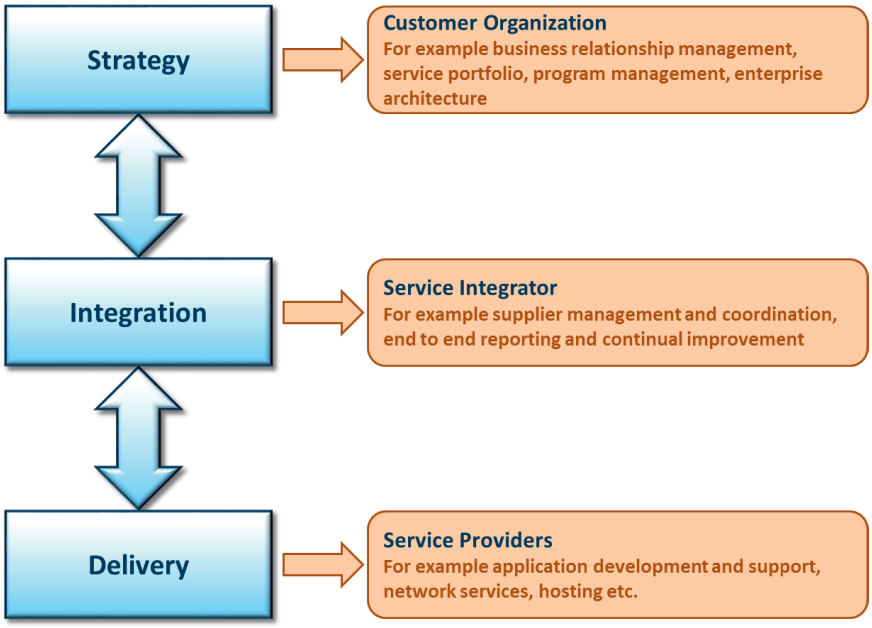

Figure 3 Focus of the SIAM layers

1.1.2. SIAM Practices

Practice: *the actual application or use of an idea, belief, or method, as opposed to theories relating to it.*[1]

SIAM includes specific practices that differentiate it from other management frameworks. These practices support governance, management, integration, assurance, and coordination across the layers.

Examples of practices are described in Section 6: SIAM Practices.

- People practices: managing cross-functional teams
- Process practices: integrating processes across service providers
- Measurement practices: reporting on end to end services
- Technology practices: creating a tooling strategy.

SIAM also draws on other areas of IT and management 'best practice' – see Section 4: SIAM and Other Practices.

1.1.3. SIAM and Processes

Process: "*a documented, repeatable approach to carrying out a series of tasks or activities*"

SIAM itself is not a process; it draws on and uses other management processes.

Most management approaches expect processes to be executed within one organization. In SIAM, these processes may also be executed:

- Across organizations in the same SIAM layer
- Across organizations in different SIAM layers.

Many of the processes used within a SIAM ecosystem are familiar processes like change management and business relationship management. Within a SIAM model, however, these processes require adaptation and augmentation to support integration and coordination

[1] Source: Oxford English Dictionary © 2017 Oxford University Press

between the different parties. They also require alignment with the SIAM practices.

Although this is not an exhaustive list, processes used within a SIAM ecosystem can include:

- Audit and control
- Business relationship management
- Change management
- Release management
- Commercial/contract management
- Continual improvement
- Event management
- Financial management
- Incident management
- Request fulfilment
- Service catalogue management
- Information security management
- Knowledge management
- Monitoring, measuring, and reporting
- Problem management
- Project management
- Software asset and configuration management
- Service level management
- Service portfolio management
- Supplier management
- Toolset and information management
- Capacity and availability management
- Service continuity management
- Service introduction, retirement, and replacement.

These processes need to be allocated to the appropriate layers in the SIAM model. This allocation may be different for each implementation of SIAM.

Some processes will span multiple layers. For example: the customer organization and the service integrator can both carry out elements of supplier management; the service integrator and service providers will each have responsibilities in the end to end change management process.

1.1.4. SIAM Functions

Function: *an organizational entity, typically characterized by a special area of knowledge or experience.*[2]

Each organization in the SIAM ecosystem will determine its own organizational structure. This structure will include functions that execute specific processes and practices.

The service integration layer in the SIAM ecosystem has specific functions. These are where the service integrator carries out the activities for governance, management, assurance, integration and coordination.

Whilst these functions may seem similar at a high-level to those from other management methodologies, the activities can be different as they primarily focus on coordination and integration as opposed to operational activities.

The precise functions will vary for different implementations of SIAM, as they are dependent on the definition of roles and responsibilities across the ecosystem, and the detail of the SIAM model that has been adopted.

1.1.5. SIAM Roles

Roles and responsibilities need to be defined, established, monitored and improved within a SIAM ecosystem.

This includes the roles and responsibilities of each:

- Layer
- Organization
- Function
- Structural element.

[2] Source: IT Process Wiki

High-level policies for roles and responsibilities are defined during the Discovery and Strategy stage of the SIAM roadmap. More detail is added during the Plan and Build stage.

Roles and responsibilities are allocated to relevant parties during the Implement stage. They are then monitored during Run and Improve and amended as required.

1.1.6. SIAM Structural Elements

Within SIAM, 'structural elements' are organizational entities that have specific responsibilities and work across multiple organizations and layers in the SIAM ecosystem.

These structural elements link the functions with the practices, processes, and roles of SIAM.

The role of the structural elements includes:

- Governance
- Developing and maintaining policies
- Developing and maintaining data and information standards
- Reviewing and improving end to end service performance
- Reviewing and improving capability and maturity
- Identifying, encouraging, and driving continual service improvements and innovation
- Resolving shared issues and conflicts
- Delivering specific projects
- Integration, aggregation and consolidation of data to form an end to end view
- Recognizing and rewarding success.

Structural elements include representatives from the service integrator, the service providers, and, where required, the customer.

Using structural elements helps to establish relationships between the different parties. This encourages communication and collaboration, as attendees work together to achieve shared goals.

The use of structural elements differentiates SIAM from other methodologies, and helps to facilitate the desired outcomes from SIAM.

There are three types of structural element:

1. Boards
2. Process forums
3. Working groups.

1.1.6.1. Boards

Boards perform governance in the SIAM ecosystem.

They are formal decision making bodies, and are accountable for the decisions that they take. Boards will convene regularly, for as long as the SIAM model is in place.

In SIAM, governance activities are carried out by boards operating at strategic, tactical and operational levels. Examples are:

- Strategic: approval of funding, contractual and commercial agreements, and strategy
- Tactical: approval of policies
- Operational: approval of changes to services and processes.

1.1.6.2. Process Forums

Process forums are aligned to specific processes or practices. Their members work together on proactive development, innovations, and improvements.

Forums will convene regularly, for as long as the SIAM model is in place. Their responsibilities include:

- Developing and sharing common working practices
- Developing data and information standards
- Continual improvement
- Innovation.

For example: a problem management process forum can be established with problem management peers from each service provider and the service integrator. They can jointly develop a set of key performance indicators for the problem management process.

Figure 4 shows an example of peer to peer process forums.

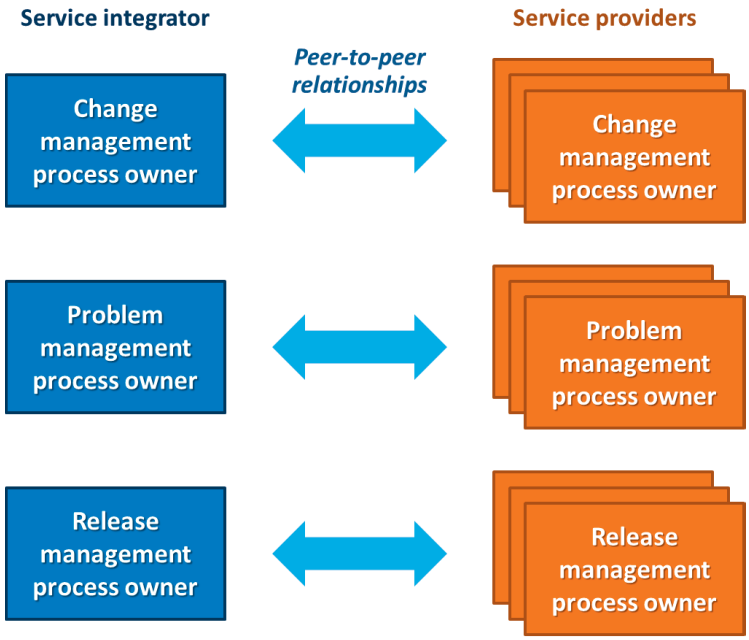

Figure 4 Peer to peer process forums

1.1.6.3. Working Groups

Working groups are convened to address specific issues or projects. They are typically formed on a reactive ad-hoc or fixed-term basis. They can include staff from different organizations and different specialist areas.

For example: an ad-hoc working group could be established with members from several service providers to investigate an intermittent issue with the performance of an integrated service. This could include specialists from capacity management, IT operations, development, problem management and availability management.

Or, a fixed term working group could be established to manage the delivery of an integrated release. The members would be from all layers and from multiple processes and functions.

Process forums and working groups often involve the same people, so can be combined into the same meeting if appropriate. In these combined meetings, it is important to ensure that there is a focus on proactive as well as reactive activities.

1.1.7. SIAM Models

Each organization will develop its own SIAM model, based on the layers in the SIAM ecosystem. The SIAM model that an organization adopts will be influenced by several factors:

- The services that are in scope
- The required outcomes
- The use of proprietary models by externally sourced service integrators.

Because of this, there is no single 'perfect' SIAM model. No model is 'better' than any other, although some may be more suitable to particular implementations than others.

Different organizations adapt models to meet their own needs. All models share common characteristics that are aligned to the methodology described in this BoK.

Figure 5 shows a high-level SIAM model, including the relationships between SIAM layers practices, processes, functions, and structural elements.

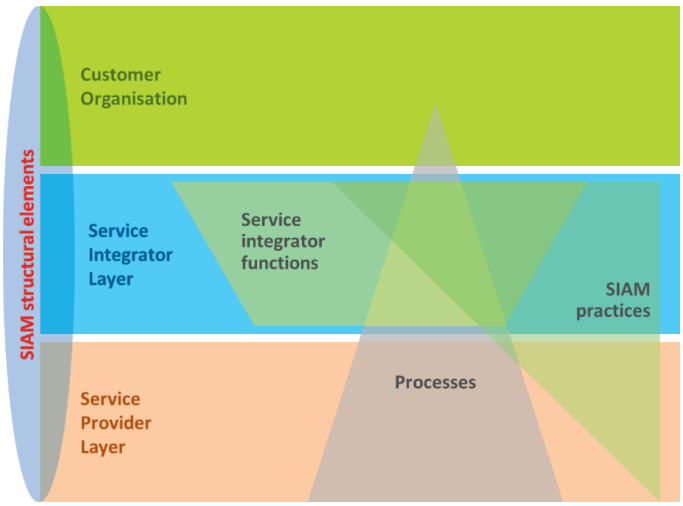

Figure 5. A high-level SIAM model

1.1.8. SIAM Contractual and Sourcing Considerations

Within the SIAM model, the customer owns the contractual relationship with external service providers and any external service integrator.

The service integrator is empowered to act on behalf of the customer, exercising the parts of the contract related to the delivery of the services by the service providers.

The contracts between the service providers and the customer organization must make it clear that the service integrator is the agent of the customer, whether that service integrator is internally sourced or externally sourced.

In many existing customer and provider relationships, standard contracts have limited the ability to transition to SIAM. For SIAM to be effective, the customer organization needs to select the right service providers and have suitable contracts in place.

SIAM contracts are typically shorter and more flexible than traditional IT outsourcing contracts. Targets within the contracts should encourage service providers to work together.

Contracts must also allow flexibility to accommodate future change. They must allow for services and ways of working to adapt to changing business and technology strategies.

Contracts should also encourage all parties to contribute to service improvement and innovation and include targets to support collaboration and innovative behaviour.

1.2. The History of SIAM

1.2.1. SIAM as a Concept

Organizations have been using services delivered by multiple service providers for many years. They have recognized the need for service integration across service providers, and used different approaches to try and achieve end to end service management.

Historically, models for managing this type of ecosystem were proprietary to very large service providers, developed to meet specific client requirements, and rarely shared outside those providers.

In most cases, these service providers also delivered significant systems integration capabilities, but with no clear separation from service integration. These organizations were typically referred to as Systems Integrators (SI) or IT Outsource (ITO) providers.

1.2.2. The Emergence of the Term 'SIAM'

The term 'service integration and management' or SIAM, and the concept of SIAM as a management methodology originated in around 2005 from within the UK public sector, which was also the source of other best practice methodologies such as ITIL®.

The methodology was initially designed for the Department of Work and Pensions to obtain better value for money from services delivered by multiple service providers, and specifically to separate service integration capabilities from systems integration and IT service provision.

This new approach reduced the duplication of activities in the service providers, and introduced the concept of a 'service integrator'. This new service integration capability provided governance and coordination to encourage service providers to work together to drive down costs and improve service quality.

SIAM was viewed as a methodology, not a function. Within the methodology, a service integrator provided a set of service integration capabilities.

The SIAM methodology that was emerging facilitated collaboration between the various service providers, and management of interfaces between them. The service integrator was 'one step above' the service provider layer.

Processes were used in the SIAM ecosystem to define activities, inputs, outputs, controls, and measurements. The methodology allowed individual service providers to act autonomously and define the specific

mechanisms that enabled those activities. These were then audited and assured by the service integrator.

Figure 6 shows a simple view of the SIAM model.

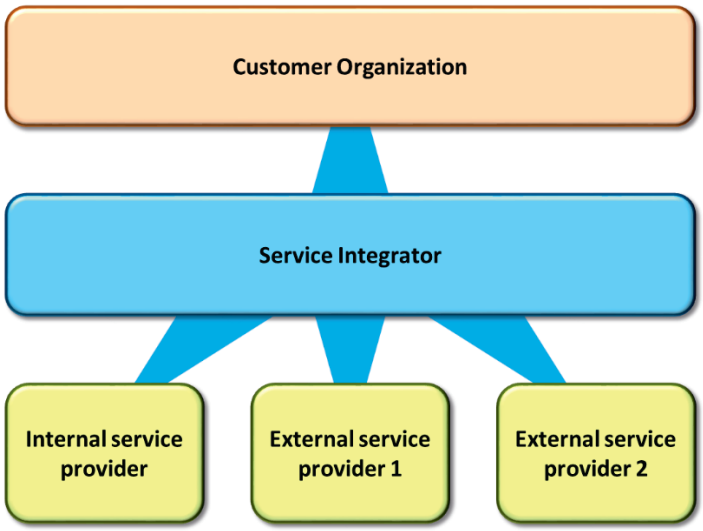

Figure 6. A simple view of a SIAM ecosystem

1.2.3. Growth and Adoption of SIAM within UK Government

In 2010, the UK Government published a new information and communications technology (ICT) strategy. This included moving away from large prime supplier contracts to a more flexible approach using multiple service providers and cloud based solutions.

A paper was published in support of this strategy that set out a new approach for service management governance and organization. The proposal was to appoint an appropriate service management framework to coordinate multiple services, providers and consumers in a secure and seamless lifecycle of service delivery and improvement. This accelerated the development and awareness of SIAM both in the UK public sector and elsewhere. This acceleration led to the publication in 2012 of the UK Government 'Cross Government Strategic SIAM Reference Set'. This was developed from experience and expertise in SIAM from the Department of Work and Pensions, Ministry of Justice, NHS

Connecting for Health, and the Government Procurement Service. Figure 7 shows the SIAM Enterprise Model from this reference set.

The aim of the reference set was to enable transformation in UK public sector organizations to a disaggregated, multi-sourced, multi-service environment.

The reference set described a wide range of SIAM capabilities and a suggested enterprise model, but encouraged adaptation to suit local requirements.

This was the first widely available description of SIAM. Its publication rapidly increased the awareness, development, and discussion of SIAM worldwide.

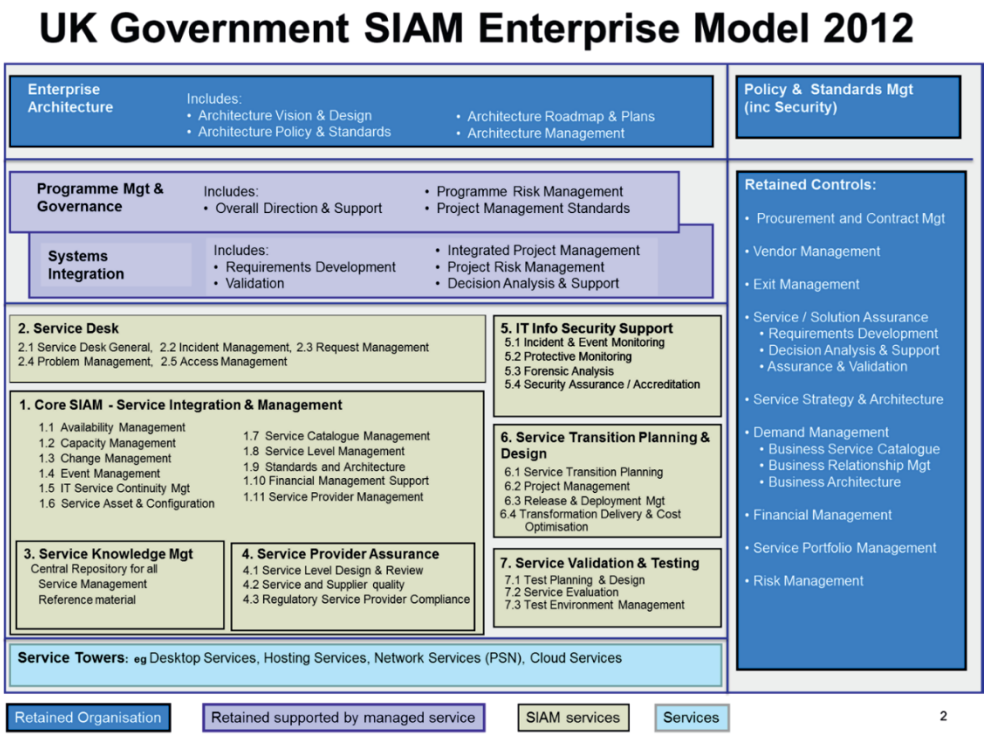

Figure 7 SIAM Enterprise Model from Service Integration & Management (SIAM) Framework Cross Government Reference Set, October 2012

The contemporary UK Government Service Design Manual advised that:

"The level of service integration will differ depending on the complexity of the business services and/or customers that are being supported, and the complexity of the services that are being delivered to those businesses. As the services and businesses become more critical or complex, the level of service integration becomes deeper.

The design of the service integration function will differ by department. It may be completely operated in-house. Or it might consist of a thin in-house capability ultimately responsible for the integrated end to end operation and management of quality IT services, underpinned by outsourced integration services for specific elements – for example performance monitoring, service desk, or service level reporting. Particularly for smaller departments and simple services, care needs to be taken not to over-engineer the service integration approach – effective use of commodity standards-based IT should mean that integration and support requirements are much less onerous than managing a locked-down bespoke system."[3]

1.2.4. Recent History

More recently, the development of approaches to SIAM and its adoption has increased significantly. This has been driven by strategic factors including:

- A worldwide need to improve value
- A desire to remove reliance on single suppliers
- The need for effective controls
- A desire for the ability and flexibility to use 'best of breed' service providers and services, including the use of commodity cloud-based services.

The development and adoption of SIAM has been accompanied by an increase in the number of publications on SIAM, and the number of commercial organizations offering service integration capabilities; many of whom have their own model.

[3] Source https://www.gov.uk/service-manual

"Against a backdrop of increased business and IT complexity, the IT service provider is faced with a challenge to deliver more with less. Customers demand IT cost transparency and demonstrated value. Additionally,
multi-sourced service delivery is the new reality for many. Both customers and users are demanding innovative technology solutions and access to each providers' specialisms, but do not necessarily want to be presented with the issues that controlling the complex web of multiple providers brings.

The multi-provider delivery models evident in many modern enterprises have created an interest in the benefits SIAM can bring. More and more customers are calling for better defined and more cohesive control structures that will allow the management of multiple service providers in a consistent and efficient way. They demand performance across a portfolio of services that meets the needs of the users and can be flexed as the needs change."

Source: Who is the King of SIAM? Whitepaper, Simon Dorst, Michelle Major-Goldsmith, Steve Robinson

Whilst SIAM itself may not be new, what is new is the recognition that SIAM is essential to support the delivery of value in multi-supplier ecosystems.

As more and more organizations move to this way of delivering services, the need for a standardized methodology for service integration has become apparent.