

**POINT OF  
VIEW**

# Improving your Total Cost of Ownership (TCO) through capability-based Application Portfolio Management



# Introduction

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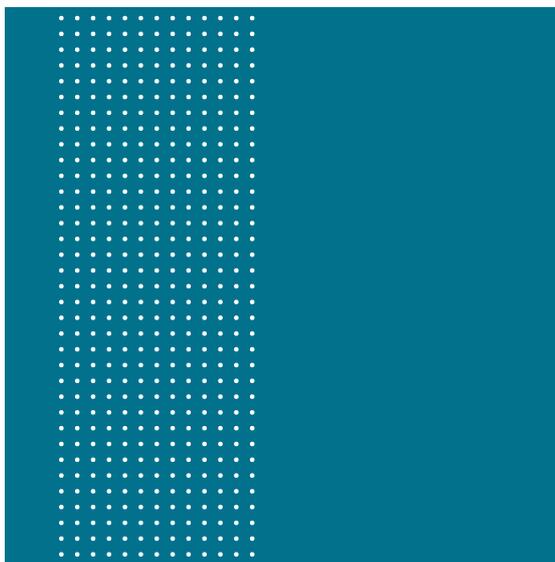
Application portfolio management is the continual measurement of the business and financial impact of an organisation's application portfolio against the benefits this provides to the organisation, in order to identify opportunities to optimise the use of assets (applications, hardware, etc.) within the portfolio.

Just as a fund manager optimises financial holdings, through application portfolio management, an organisation will look to dispose of or replace applications that are not performing well - not delivering business value for their cost or are ageing or redundant - with applications that will perform well (i.e. modern applications or technologies, consolidated applications or platforms).

Whilst application portfolio management is often solely associated with reducing operating and maintenance costs, it can deliver so many more benefits to the business: effective application portfolio management can help improve efficiency and reduce complexity within your organisation, allowing it to maintain or enhance responsiveness without necessarily requiring further funding.

Despite the attractive opportunities provided by effective application portfolio management, organisations often simply undertake a single rationalisation exercise, or worse still believe they are performing continuous rationalisation by simply removing applications as they come into view of continuous improvement initiatives.

This paper explores Sopra Steria's view on how continual application portfolio management, using enterprise architecture, can help you manage your application portfolio by concentrating on the business capabilities required by your organisation.



# Understanding your capabilities

Before an organisation can perform application portfolio management, it needs to understand its existing capabilities. This allows any decision to be taken within the context of the organisation's business and response needs. By augmenting this view with a consideration of required future capabilities, provided by enterprise architecture, an organisation can take a longer term position on its portfolio and improve performance over time.

## What is Enterprise Architecture?

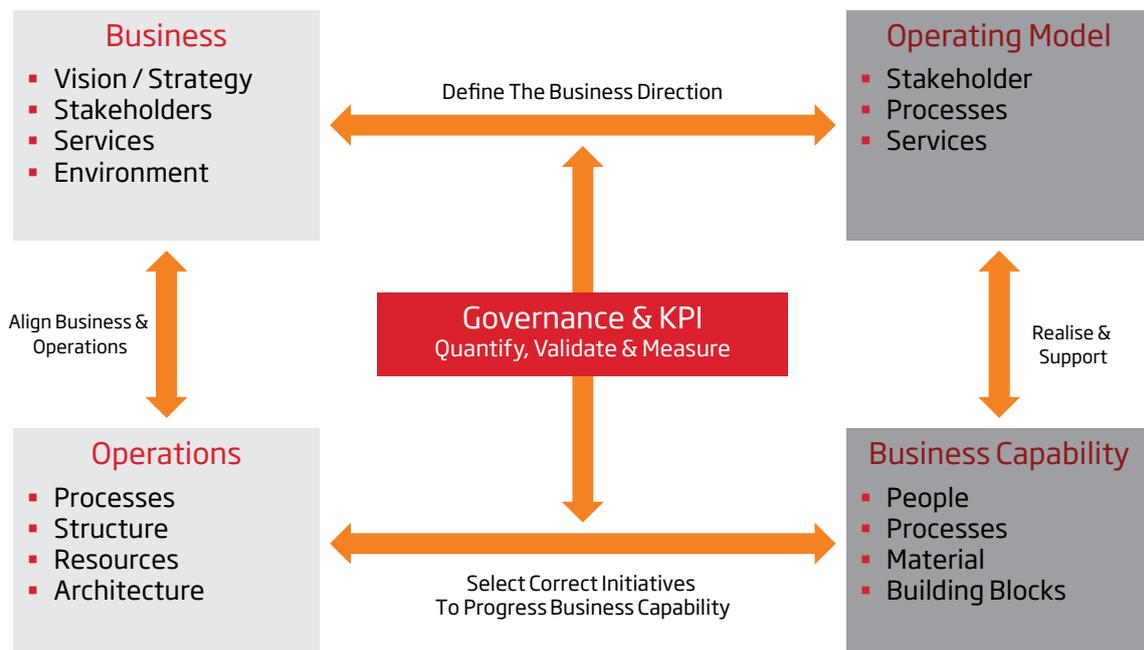
An enterprise architecture is effectively a realisable blueprint for business and IT change that captures an organisation's strategic objectives and vision as well as the various entities, assets, relationships and processes within the organisation.

Once defined, an enterprise architecture provides a tangible insight into an organisation's strategy, and guides projects and programmes to ensure they meet their objectives and deliver the required value.

Every organisation has an enterprise architecture, whether it is documented or not, but it is only when the enterprise architecture is formally defined that it can be used as a strategic lever within the business.

## Forming your architecture vision

To be able to take advantage of application portfolio management, you must have a clear vision of your current state and your future state within your enterprise. Therefore, you must start to form the enterprise architecture blueprint for change.



## Defining the future

The first stage of defining an enterprise architecture blueprint is to outline the current state of your enterprise, comprising both your business architecture and your future operating model.

### Business architecture

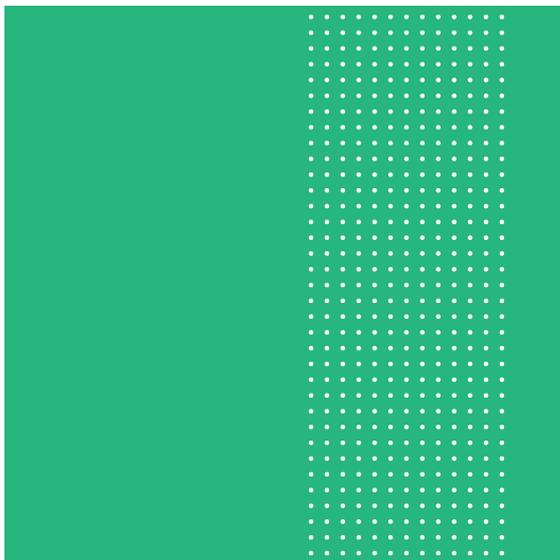
The first stage in creating the enterprise architecture blueprint is to define the business architecture: a single non-ambiguous view of an organisation's business strategy, resources, business processes, knowledge and its context (organisation and environment).

The business architecture is the key driving point within an enterprise architecture exercise as it provides an overarching environment to form the rest of the enterprise architecture blueprint.

For the application portfolio management exercise, the business architecture provides the context for any optimisation decisions.

### Future operating model

Having defined the business vision and architecture, an organisation can then define the future operating model that it would like to transition to.



Depending on the scope of the enterprise architecture exercise within an organisation, the future operating model may detail a key transformation for the organisation, or may show an evolutionary change to the existing model.

## Transition to the future

Before you can move to the future state you need to understand your existing capabilities, therefore the enterprise architecture must capture the current operating model. By comparing the current and future operating models, the organisation can then build a view of initiatives required to deliver change.

In terms of the application portfolio management process, this will provide a view of the capabilities required as well as when they are required, enhancing the portfolio analysis during the portfolio management process.

# Analysing your portfolio

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By using an organisation's enterprise architecture blueprint as opposed to a simple rationalisation exercise, the application portfolio management process can now be aligned to the business, enabling a true assessment of the portfolio's performance against the organisation's goals. This is performed by exploring the cost of providing the organisation's required capabilities using the portfolio in place.

## Application to capability mapping

In order to manage your portfolio you must first create an inventory of the applications that comprise the portfolio itself by capturing details on the applications, their underlying infrastructure services, their risk profile in the business and their fiscal profile such as cost to run, cost to maintain, etc.

Many organisations have a starting point for this exercise through their help-desk or asset management system, however, given the proliferation of 'almost enterprise' applications developed or procured directly by users without IT involvement, it has become increasingly difficult to track applications that silently become part of an organisation's portfolio. Examples include the popularity of cloud-based tools such as Salesforce being procured directly by an individual department, or a Microsoft Access database that has over time become a critical and embedded tool within a department's processes.

Therefore, during the inventory stage it is recommended that a combination of reviews, interviews and observations are conducted in order to ensure that you get a complete view of the portfolio.

Once finalised, the inventory can then be mapped on to business capabilities identified within your proposed business architecture. This process is designed to identify both cross-over between applications and their related components, and gaps within your true capability against what is required.

## Capability-based portfolio management

Having completed an application to capability mapping exercise, information is now available to allow an organisation to make business-aligned portfolio-management decisions.

By exploring how an application, and its related technical infrastructure, relate to the business capabilities required by the organisation's enterprise architecture, any decision within the business, application or infrastructure architectures can be aligned to the business strategy.

The most common approach in an application portfolio management initiative is to look down into the information and infrastructure architectures, looking only at the technology usage within the enterprise.

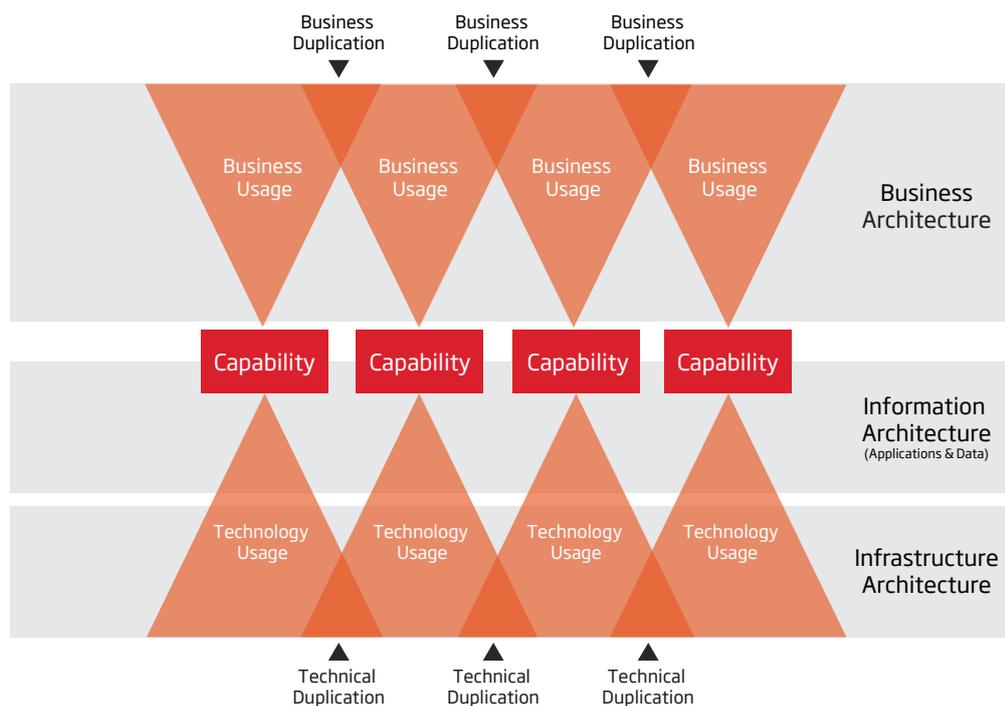
To fully explore the application portfolio it is best to take a middle-out approach from the capabilities within the enterprise architecture, into the component architectures: business architecture, information architecture and infrastructure architecture.

Within the information architecture, where multiple applications serve the same capability or no capability at all, this highlights an opportunity for rationalisation or removal. Conversely, where multiple capabilities are served by the same application, this highlights an area of importance to the business that should be managed and nurtured.

The applications and data within the information architecture are underpinned by components within the infrastructure architecture, and the associated usage of these components provides both risk and opportunities as part of the portfolio.

Within the infrastructure architecture, where components serve the same application or no application at all, this highlights an opportunity for rationalisation or removal. As with the information architecture, where multiple applications are served by the same components, this highlights an area of importance to the business that should be managed and nurtured.

## Capability driven portfolio map



Further to the above mapping, it is important to review the components highlighted against criteria including:

- **Cost-Benefits Analysis** - what is the cost of running the component versus the benefit provided to the business (both quantitative and qualitative)?
- **Risk Profile** - how important is the application/ component to the business, what is the risk of a failure; is it a strategic technology or an ageing one?
- **Functional and Architectural Fit** - both for current and future states.

The above criteria contribute to the overall cost-benefit assessment and can be used to explore the impact of changing, removing or rationalising components within the architectures.

By building on the concepts used above, an organisation can also look at its business usage by looking up from its capabilities into the business architecture to understand duplication within business processes.

It is important to understand when analysing the business architecture that any overlaps may not necessarily highlight duplication, however they do suggest optimisation of the processes may be possible.

Having analysed the portfolio, the next step for an organisation is to create a portfolio roadmap to plot the proposed journey from analysis to implementation within the organisation.

Typically, this roadmap is aligned to the organisation's existing change management processes, such as ITIL's Implementation Roadmap, however, it can exist as a standalone entity used to drive change over time.

## Continual management

Just as with a financial portfolio, an organisation's application portfolio should be continually reviewed and optimised to ensure alignment to the business strategy and continued best-use of assets. Therefore, it is recommended that organisations explore setting up a formal application portfolio management process.

This need not be a large investment as many existing tools within organisations are capable of supporting the process, including specific tools such as Oracle Primavera or CA Clarity that can ease both the governance and analysis processes.

Given the synergy between application portfolio management and enterprise architecture, it is recommended that both be considered together to allow the cost-benefit analysis to be performed as part of the core architecture governance and ensure the use of assets within the portfolio is a key consideration in all change.

# Conclusion

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Allied to the current global and local economic climate is the increasing competition from the global market place, with new competitors entering or forming within markets and mergers and acquisitions producing combined entities able to drive economies of scale.

To compete in this challenging environment, our clients have found the need to innovate and adapt their business to deliver better service to meet the more “demanding demands” being placed on them both internally and externally, within increasingly tighter budgets.

Many of these clients are turning to enterprise architecture and related approaches such as application portfolio management to help them meet their challenges by focusing on enabling their required capabilities.

Sopra Steria believes that to take full advantage of the opportunities provided by application portfolio management it should be aligned to enterprise architecture.

Our Enterprise Architecture services are based on our global experience across many sectors and have been tailored to provide practical guidance to help you define, implement, control and leverage your organisation's enterprise architecture.

At Sopra Steria we believe in “pragmatic architecture”. By “pragmatic” we mean that we help you implement the right-level of governance and process, by tailoring the frameworks and practices available within the Enterprise Architecture space to ensure a fit with your organisation and its culture.

If you would like to discuss how you could apply Application Portfolio Management or Enterprise Architecture pragmatically, then Sopra Steria can arrange a meeting with one of our locally based consultants.

## About Sopra Steria

Sopra Steria, European leader in digital transformation, provides one of the most comprehensive portfolios of end to end service offerings in the market: Consulting, Systems Integration, Software Development and Business Process Services. Sopra Steria is trusted by leading private and public organisations to deliver successful transformation programmes that address their most complex and critical business challenges. Combining high quality and performance services, added-value and innovation, Sopra Steria enables its clients to make the best use of information technology.



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