
Keane White Paper

Application Rationalization

Reducing the High Cost of
Low-Value Applications

EXECUTIVE SUMMARY

By proactively identifying, eliminating, and/or remediating poorly performing application assets, Applications Rationalization helps companies reduce costs, target efforts to the areas of highest return, and maximize the business value of their application portfolios.

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Abstract

Every company faces the challenge of maximizing their return on investment in IT applications. However, the speed of technology advancements and the rapid pace of today's business environment often force companies to rely on an application long after it has ceased to provide maximum value to the business. Such an application becomes increasingly costly to the business and impedes IT productivity because of its complexity and constant support requirements. Add costly non-core technology and redundant applications inherited from mergers and acquisitions, and it becomes clear how application portfolios can quickly – and quietly – drain IT resources and corporate bottom lines.

By objectively evaluating an application portfolio and measuring the cost of each application against the business value it provides, companies can then “rationalize” applications that are generating little or no business benefit – and at the same time extend the lifecycle of aging applications that can still provide a desirable return on investment.

This white paper will help executives understand how Applications Rationalization – a proactive, disciplined, and investment oriented approach to identifying, eliminating, and upgrading low-value applications – can help them optimize their application portfolios.

The paper also:

- » Identifies the categories of low-value applications typically found in corporate IT portfolios
- » Details the steps that comprise Applications Rationalization

- » Demonstrates how Applications Rationalization activities lead to reduced costs and enhanced business flexibility

Introduction

An application is not an asset if its costs exceed the value that it delivers. Although IT application portfolios are, as a whole, immensely valuable assets, they universally contain a mixture of high, low, and medium value-producing applications. Low-value applications accumulate over time through aging, mergers and acquisitions, technology shifts, and never-quite-completed replacement projects. These applications are disproportionately expensive to the level of business value they produce. Worse, they draw funds and resources away from higher value-producing opportunities. Even applications that are “profitable” in a direct expense-to-value calculation may be problematic in a big picture view. Their technical and functional limitations affect a company's ability to respond rapidly to changing requirements, and make it difficult to integrate with other initiatives.

Application aging is inevitable, but taking a proactive and disciplined approach to low-value applications can mitigate their consequences, saving resources and increasing the overall value of the application portfolio. Applications Rationalization seeks to systematically and proactively improve the business performance of IT application portfolios by quantifying the value of each application within the portfolio, eliminating or retiring redundant and end-of-life applications, and upgrading applications that still produce value. By lowering costs and improving performance, Applications Rationalization directly impacts

corporate bottom lines. It frees budgets and IT staff for new development and other value-adding activities. It also allows for the elimination of non-core technologies and platforms to produce even greater savings. Improving applications with residual value extends their useful life and may even enable integration with other corporate initiatives, increasing the flexibility to respond to new business requirements, and enables businesses to achieve maximum value from their IT investments. Disciplined management of application portfolios allows these assets to achieve their full potential by capturing greater benefit from production systems, freeing funds and IT resources to pursue high-value opportunities, and providing the foundation and flexibility to respond more quickly to changing business requirements.

The Application Lifecycle

Every application travels through a lifecycle that runs from development to retirement, as illustrated in figure 1. Each phase requires a different strategy to generate maximum value for the business. In the earliest phase of the lifecycle, an IT organization invests heavily in developing an application before receiving business value. At its peak, a well-designed application will provide a high ratio of business value to IT costs. As the application moves into the final phase of its lifecycle, its business value starts to decline and its support costs rise. The eventual result is a low-value application. A company begins to pay an increasingly high cost for the value it receives until the point at which the application is enhanced, replaced, or retired, thus extending, renewing, extending or

ending the lifecycle. The following categories of low-value applications are typically found in corporate IT portfolios.

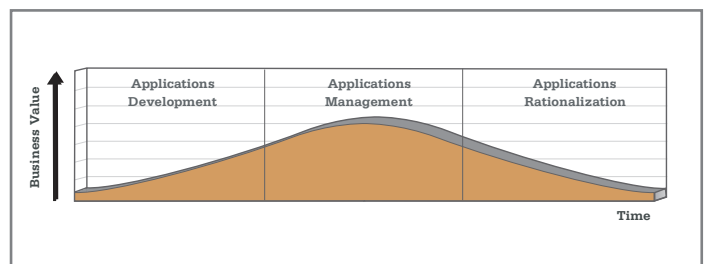
Aging Assets

Applications decline in quality as they age. Years of maintenance, enhancements, and production patches by a variety of programmers inevitably degrade technical quality, increase error rates, elevate support costs, and intensify the difficulty of incorporating new changes. Declining technical quality frequently leads to declining functional quality as applications fail to keep pace with new business requirements, resulting in lost business opportunities.

Redundant Functionality

Application portfolios often contain many versions of the same functionality. Mergers and acquisitions frequently bring duplicate applications with near-identical functionality, and users are known to keep “pet” applications even after their replacements have been deployed. Redundancy wastes resources, increases the risk of errors, and “clutters” the production environment, which negatively impacts organizational flexibility and scalability.

Figure 1: The High Cost of Low-Value Applications
Every application in the portfolio evolves through a three-phase lifecycle – development, management, and rationalization – providing varying levels of business value according to its position in lifecycle



Disparate and Incompatible Applications

Over time, application portfolios accumulate “odds and ends” of isolated and incompatible applications. These applications may require costly specialized skills and new software and/or hardware to operate, making them difficult to fit within common IT architectures.

Non-Core Functions

Changing corporate priorities leave remnant applications that support de-emphasized corporate strategies. While these applications may still deliver to their intended purpose admirably, they no longer justify a high level of support.

Non-Core Technologies

Sometimes valuable application functionality resides on costly, outdated, or no-longer-strategic technology, or it necessitates buying software or services from an undesirable partner. Supporting non-core technology is costly, difficult, and tedious for IT staff members, but is necessary unless that application functionality can be migrated or retired.

How Applications Rationalization Can Help

Applications Rationalization addresses low-value applications from a business point of view. Using objective measures, it identifies the under-performing assets within the application portfolio and, depending on their situation, restores them to profitability or decommissions them to save funds and free resources.

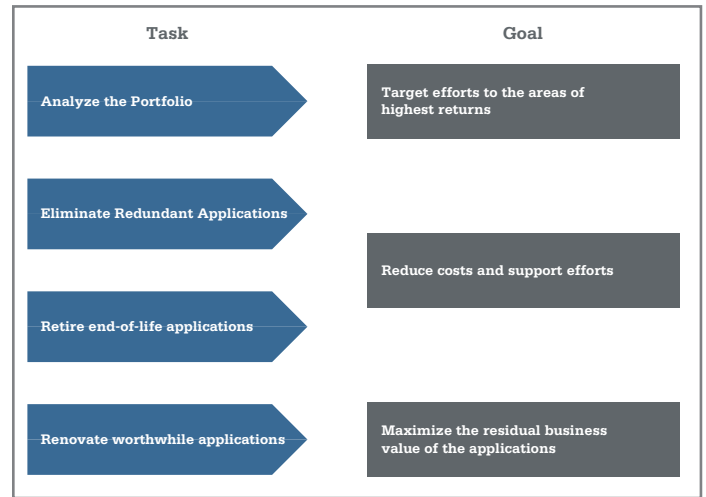
It provides executives with the information they need to eliminate “pet” applications that pull staff, budget, and attention from higher value objectives, and the services and expertise to cost-effectively extend the life and increase the ROI of still-valuable applications. Applications Rationalization encompasses four major tasks as described below and illustrated in figure 2.

Analyze the Portfolio

Goal: Target your efforts to the areas of highest return

The first step in an Applications Rationalization effort is to analyze the state of the applications within the IT portfolio in order to understand their current condition, quantify their cost of operation and support, and measure their value to the business. This information identifies each application’s lifecycle positioning, calculates the opportunity for improvement, and determines the actions needed to optimize the application’s business effectiveness. It creates a prioritized action list to maximize the

Figure 2: How Applications Rationalization Can Help



benefit of rationalization investments. Portfolio analysis becomes a continuous process, regularly monitoring the state of the portfolio as its applications and business objectives evolve.

Eliminate Redundant Applications

Goal: Reduce costs and support efforts

Redundant applications are costly to support and provide little or no incremental benefit over proper use of a single application. This step identifies overlapping functionality and determines the strongest application which is to remain. If necessary, it harvests discrete functionality from the redundant applications and incorporates it into the strongest application to ensure functional coverage. Equally important is the clean-up and migration of data from the redundant applications to the remaining application. The last activity in this process is decommissioning the extraneous applications.

Retire End-of-Life Applications

Goal: Reduce costs and support efforts

An application reaches the end of its useful life when its cost of operation and support approaches or exceeds the business value it produces. Without a portfolio analysis to measure costs and value, an end-of-life application can drain IT resources for years before it is noticed and retired. In cases where the original business purpose still has merit, the best strategy may be to develop a new application operating on a less costly and more strategic platform to replace the aged one. If the application's functionality is no longer core to the business, it is decommissioned.

Renovate Worthwhile Applications

Goal: Maximize the residual business value of the applications

Where appropriate, targeted improvements can extend the life and restore the value of an under-performing application. Migrating an application from a non-core technology to a newer, more strategic platform extends the application's useful life by enhancing its flexibility and scalability while saving the cost of supporting the older platform. Improving the technical quality of an application enhances its maintainability, reducing costs, and improving extensibility. Depending on an application's functional quality, its business value can be improved through functional enhancements, or pertinent functionality can be extracted and moved to a newer application. Once worthwhile applications are restored, additional value can be obtained by integrating otherwise disparate applications within the company's strategic architecture. Much of this highly defined work is suitable for assignment to offshore development facilities to lower cost and further increase ROI.

Rationalizing the Benefits

IT organizations typically focus so intensely on the development of new applications and the operational management of production applications that they miss the benefits they could receive from addressing the low-value applications within their portfolios. By providing a method for proactively identifying, eliminating, and/or remedying poorly performing application assets, Applications Rationalization

offers benefits that are straightforward, immediate, and quantifiable. Investments in Applications Rationalization are easily justified. In tight economic times, it provides significant cost savings that flow directly to the corporate bottom line, and it frees resources for projects that would otherwise be deferred. In abundant times, it provides the resources and flexibility to respond more rapidly to business opportunities. The major benefits of Applications Rationalization fall into the following categories.

- » **Saves money.** Applications Rationalization achieves significant cost savings by eliminating underperforming application assets, lowering the operating costs of retained application assets, and enabling the consolidation of IT platforms. Consolidating applications on newer platforms enables IT organizations to eliminate considerable hardware, software, support, and operational costs.
- » **Frees resources.** Applications Rationalization introduces efficiencies that free staff and budgets for purposes that provide greater business value. Rather than supporting applications that provide marginal business value, IT organizations can focus their attention on developing new applications, supporting business-critical applications, and tackling other value-adding activities.
- » **Enhances flexibility.** Fewer and higher quality applications are easier to maintain and enhance, increasing an organization's ability to respond to or initiate business changes. Moving application functionality to newer and more scalable architectures provides IT organizations with the flexibility to extend the application as needed to support new business requirements. Integrating

restored applications and their data with other systems provides greater access to corporate information and gains operational efficiencies. By streamlining an application portfolio and cleaning applications "clutter", organizations decrease the complexity and cost of integrating new applications and increase the strategic flexibility to pursue new business opportunities and mergers and acquisitions.

- » **Extends the life of valuable functionality.** IT applications provide their value through the business services they perform. By improving application performance, Applications Rationalization allows the company to gain more of this value over a longer period of time, increasing the return on original investment in the application.

Conclusion

Keane offers an Applications Rationalization Assessment as a first step for companies interested in optimizing their application portfolios. This targeted portfolio analysis provides specific recommendations on how to reduce the high cost of low-value applications and maximize the business value of your application portfolio. During this eight to twelve week engagement, a Keane business consulting team will perform a functional, technical, and strategic review of your application portfolio, understanding the state of its applications, finding under-performing assets, and identifying, estimating, and prioritizing opportunities for gaining significant benefits from Applications Rationalization initiatives. Focusing on providing

measurable results, the team will quantify the expected business value of such opportunities and recommend appropriate next steps.

By the end of an Applications Rationalization Assessment, an organization will have a clear picture of the current state of its application assets and a wealth of information on how to enhance their

business value while reducing costs and freeing resources for more strategic initiatives.

Implementing Keane's prioritized Applications Rationalization recommendations will provide immediate, quantifiable results, maximizing the return on your improvement investments.
