

Why are you still paying for Retired Applications?

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# **EXECUTIVE SUMMARY**

Today's organizations clearly understand the benefits of implementing rationalization initiatives to cut costs and optimize the utilization of increasingly complex application portfolios. Unfortunately and despite their importance, some of these initiatives end up as "paper exercises", where the retired applications identified are later found still running.

A number of issues contribute to this, including:

• Application decommissioning is often not recognized and implemented as a sustainable process

- A business-driven approach to application lifecycle management and retirement is missing
- Poor business governance of IT

KPMG member firms offer established methodology to help organizations address these issues and better manage their application lifecycle management (ALM) and governance processes. In this report we introduce the basic building blocks of an inclusive and sustainable ALM strategy, including the retirement process.

The ALM strategy views the application portfolio as a business asset and uses criteria such as business value, cost, vendor and technical viability to evaluate and manage its constituents.
The retirement process consists of five carefully structured phases: 1) portfolio validation;
2) initial retirement planning; 3) legacy cost analysis; 4) archiving strategy definition; 5) detailed planning and execution.

The proposed approach enables business owners to assess the business value and technology viability of their application assets, and decide what changes are needed and how to make them in a timely manner. In addition, when the CIO and application owners work together and communicate through a well-structured process they can more easily identify duplicate applications, legacies and unnecessary redundancies, and eliminate them long before the costs get out of control. Last but not least, this ALM strategy can help improve IT governance as it shifts the accountability for technology decisions to the business.

### APPLICATION LIFECYCLE STRATEGY NEEDED

When the leaders of a business unit at a large biotechnology company implemented a process improvement program targeting the modernization of the business unit's application portfolio, the bill of IT increased. Not only did the development require more time and effort than predicted, but the costs of ongoing IT operations spiked as well. The mutual finger pointing between application owners and the IT service provider began, and the CIO stepped in to break the impasse. With help from KPMG in the US, the stakeholders performed an assessment of their application portfolio. The results revealed that several legacy applications, which should have been retired as part of the modernization effort, were still running and generating substantial costs.

The stakeholders agreed to implement an inclusive strategy for rationalizing the legacy applications and optimizing the business unit's application portfolio management,

lifecycle management (ALM) and IT governance processes. The purpose was to help the business unit executives and application owners reduce and gain control of costs, prevent similar situations from happening in the future and make better and more sustainable technology decisions.

The biotechnology company above was not alone. We found similar situations in several other large companies that were in the midst of transforming their businesses and enterprise systems, through digitization initiatives and more traditional approaches like new product lines, process transformations, market expansions, mergers and acquisitions, and divestitures. We saw them losing track of some of the legacy applications, which unnecessarily kept consuming up to 30% of their IT budgets before optimizing their portfolios through rationalizations (see Sidebar1).

# WHY RATIONALIZATION EFFORTS OFTEN FAIL

Today's organizations clearly understand the benefits of implementing rationalization initiatives, to cut costs and optimize the utilization of increasingly complex application portfolios. According to KPMG's Technology Innovation Survey 2012, more than 67 percent of respondents indicated that their organizations were focusing on consolidating or rationalizing their application portfolios<sup>1</sup>. Unfortunately and despite its importance, some of these initiatives end up as "paper exercises," where the retired applications are later found still running, if only for read-only purposes. From a business perspective, the value of these applications rapidly decreases and their operational risks increase as they enter the "obsolescence phase"<sup>2</sup>. **BIOTECHNOLOGY COMPANY OPTIMIZES** Its IT Consumption The client was supporting a large number of enterprise applications that were expensive to maintain and lowered their return on investment for the software. To simplify the application environment, KPMG professionals recommended that the client reduce their application portfolio by 20 to 30 percent over the next several years for an annualized saving of between US\$7 million and US\$10 million.

**KPMG HELPS UTILITY COMPANY REDUCE** Its Application Footprint KPMG member firms recently helped a utility company reduce its application footprint. Using a combined top-down and bottom-up approach, KPMG professionals identified ways to reduce 20 to 30 percent of the company's portfolio by targeting functional redundancy and high-risk technology concerns. The application rationalization strategy introduced by the KPMG team also increased the company's ability to forecast resources and improve the reliability and availability of business services.

#### KPMG HELPS TELECOMMUNICATIONS COMPANY DEVELOP APPLICATION PORTFOLIO OPTIMIZATION ROADMAP A Fortune 500

telecommunications company recognized the need to streamline its IT platform. KPMG professionals implemented a strategy to analyze costs and savings at an aggregate level and focus on business capabilities. The team developed a roadmap and plan to reduce the company's application portfolio by 30 percent over a four year period. After three years, the company had reduced its application portfolio by 25 percent. Key success drivers were an executive mandate and consistent governance for target reductions in each function. These factors were backed by a clear understanding of the overall business process complexities inherent in the application portfolio.

CASE STUDIES

<sup>1</sup> http://www.kpmg.com/global/en/issuesandinsights/articlespublications/technology-innovation-survey/pages/default.aspx 2 http://www.kpmg-institutes.com/content/dam/kpmg/advisory-institute/pdf/2014/business-impact-technology-obsolescence.pdf

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#### WHY RATIONALIZATION EFFORTS OFTEN FAIL CONT.

Meanwhile, from an IT perspective they add significant costs and management effort as they continue to consume processor power, bandwidth and storage, and require resources to cover their integration, maintenance, support and delivery needs.

So why aren't business and IT executives able to do a better job at completing rationalization efforts and retiring legacy applications?

A number of issues contribute to this, including:

Application decommissioning is often a "no man's land" between business and IT. Often IT executives tend to focus on infrastructure costs like servers, storage, and networks – products and services for which they are directly accountable. On the business side, many executives and users do not actually care much about application costs, unless they pay for them directly through a chargeback to their P&L. Therefore the retirement decision often remains in some sort of no man's land between business and IT, with stakeholders focusing more on new projects and much less on the decommissioning side.

**Business driven approach to application life cycle management is missing.** One of the most common divisions of work between business and IT makes the business side responsible for budget allocations, articulating requirements, setting project priorities and schedules, and allocating funding; while the IT side is responsible for the details of IT delivery and support<sup>3</sup>. Often missing is ALM, a holistic process which ensures the alignment between business and IT at an operational level. Driven from the business, ALM assesses the value of applications as business assets to help their business owners determine and prioritize application changes, including decommissioning.

**Poor business governance of IT.** Data compiled from different surveys shows that there are two major issues that undermine the development of strong

and effective IT governance in many organizations<sup>4</sup>. First, business leaders are not well-aligned when making technology-related decisions; and second, CIOs are not leading the advancement of good governance. As a consequence the maturity level of processes like ALM can vary widely even inside the same organization, often depending on how the application owners engage with IT. This lack of consistency causes more problems in today's cloud-based world where any executive with a credit card can purchase and own applications.

## ALM: THE BUILDING BLOCKS FOR A MORE EFFECTIVE APPROACH

KPMG member firms offer a proven methodology to help organizations manage the application lifecycle including the decommissioning and governance issues highlighted earlier. In a companion report, Optimizing the Application Portfolio, we have introduced KPMG's methodology for assessing the business value of application portfolios and performing portfolio optimizations<sup>5</sup>. Here we introduce the basic building blocks of an inclusive and sustainable ALM strategy, including the retirement process.

ALM views the application portfolio as a business asset and uses criteria such as business value, cost, vendor, technical viability and governance to evaluate and manage its constituents (see Figure 1). Using these criteria organizations can:

- Define the business value of its application portfolio based on rapidreturn, high-impact actions aligned with management priorities
- Formulate business cases for optimization scenarios building on existing tools and models. Armed with a clear understanding of the applications' business value, costs and risks, the stakeholders can make better decisions on how and when to rationalize and decommission legacies and undesired redundancies, and in so doing optimize the application portfolio.

The retirement process consists of five carefully structured phases (see Figure 2):

Portfolio validation. The purpose of this phase is to capture an up-to-date view of the application landscape. A variety of data sources are consolidated into a single source of truth that details and categorizes applications by a variety of attributes. The base-lined application portfolio is then analyzed to identify, for example, systems with high levels of risk, non-compliance with corporate strategy, or duplication involving systems or processes across business units. This phase concludes with an initial flagging of potential retirement candidates for review based on survey responses. Recommendations for the best way to proceed are presented to key stakeholders.

**Initial retirement planning.** In this phase, a set of initial recommendations for retirement is generated based on a highlevel analysis of the application portfolio developed in phase one. In addition, workshops are conducted to analyze the potential impact of application retirements. This phase also involves the development of a communications plan to support the involvement and buy-in from the wider business community.

Legacy cost analysis. A better

understanding of the potential cost savings for legacy systems is developed at this point. This includes identifying the costs and any timing associated with those costs. It also includes any penalties that may be incurred such as those involving the termination of a vendor's support contract.

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<sup>3</sup> https://www.forrester.com/The+Business+Architect+Cometh/fulltext/-/E-RES60247

<sup>4</sup> https://www.forrester.com/Building+BT+Governance+Capabilities+8212+A+Practitioners+Perspective/fulltext/-/E-RES88762

<sup>5</sup> http://www.kpmg-institutes.com/content/dam/kpmg/advisory-institute/pdf/2014/optimizing-application-portfolio.pdf

#### ALM: THE BUILDING BLOCKS FOR A MORE EFFECTIVE APPROACH CONT..

#### FIGURE 1: ALM CRITERIA AND REPRESENTATIVE QUESTIONS

### FIGURE 2: THE FIVE PHASES OF THE APPLICATION RETIREMENT PROCESS





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#### ALM: THE BUILDING BLOCKS FOR A MORE EFFECTIVE APPROACH CONT..

Potential cost savings and their realization date are then analyzed to help sequence or prioritize systems for retirement. This analysis also helps to reconfirm the business case for decommissioning.

Archiving strategy definition. The purpose of this phase is to capture the specific archiving requirements and appropriate solutions for a particular business unit or application. Potential solutions adhere to the methodology's archiving principles.

They are also evaluated against a series of relevant assessment criteria that are weighted according to the local business unit's priorities and needs. This approach can be used to evaluate solutions ranging from simple, paper-based archiving to complex commercial or bespoke

archiving systems.

#### Detailed planning and execution.

This phase includes the detailed planning and execution of all activities needed to successfully implement the archiving solution and to ultimately retire the designated legacy systems. Detailed plans will take into consideration both technical and business activities. These include the design, build, test, and deployment of any archiving solutions, as well as any dependencies such as a new system golive. The validation of data for migration to the archiving solution is also included. Properly designed and implemented, an applications lifecycle management strategy can help ensure that retired applications are truly "turned off."

#### FIGURE 3: MAKING ALM DECISIONS BASED ON BUSINESS VALUE AND TECHNICAL VIABILITY

CATEGORIES OF LOW-VALUE APPLICATIONS THAT ARE CANDIDATES FOR RETIREMENT

Aging assets Applications at or near end-of-life have higher support costs and are more difficult to change or update in response to new business requirements

Redundant functionality Many application portfolios contain applications with redundant functionality, often occurring as a result of new applications being developed or purchased without retiring old ones

Disparate & incompatible applications Over time, application portfolios accumulate a myriad of miscellaneous point solutions that do not fit with the overall architecture and require specialized skills - and additional cost - to operate and maintain

Non-core functions As business goals and requirements change, some applications may no longer deliver sufficient value to the business to justify the operational cost

Non-core technology Costly or outdated platforms, or platforms dependent on support from an undesirable vendor, increase cost, complexity, and risk



# HOW AI M CAN DRIVE STRATEGIC AND OPERATIONAL BENEFITS

When actively driven by business executives, ALM turns into a powerful decision-support process. The process enables stakeholders to make management decisions based on agreed criteria, which reflect the business value and technological viability of the application assets. Figure 3 illustrates a simple blueprint of application categories that are candidates for retirement and different types of decisions related to them

### THE POTENTIAL BENEFITS TO ORGANIZATIONS **ADOPTING AN ALM STRATEGY INCLUDE:**

**Operational benefits through optimized** asset utilization. ALM enables business owners to assess the business value and technology viability of their application assets, and decide what changes are needed and how to make them in a timely manner, long before the costs and risks get out of control.

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#### HOW ALM CAN DRIVE STRATEGIC AND OPERATIONAL BENEFITS CONT..

**Strategic benefits through better portfolio management and governance.** When the CIO and application owners work together and communicate through

# **GETTING STARTED**

Most organizations begin reactively, when their costs spike unexpectedly, like the biotechnology company mentioned at the beginning of this paper. A better way is to be proactive and begin the process before receiving a budget shock from steeply higher costs.

Acquire the data. Instincts are helpful, but solid analysis is essential to an accurate understanding of current costs and cost drivers. As we know, if something cannot be quantified and accurately measured, it cannot be managed. Therefore, aim to establish a single source of truth and a few common criteria for articulating the business value and technology viability of your applications.

### a well-structured process, ALM helps the organization optimize its entire application portfolio. Stakeholders can more easily identify duplicate applications, legacies and

unnecessary redundancies, and eliminate them. Moreover, the process significantly contributes to the development of strong and effective IT governance as it shifts the accountability for technology decisions to the business side.

Learn from others, both within and outside the organization. Every business and operation is unique. At the same time, what has worked for others may be applied to new initiatives as well. Confer with trusted advisors and peers as a regular part of decision-making.

Use a business process model to structure the information. Map the applications to processes and use the results to better understand their business-criticality, increase the owners' awareness of the potential of ALM and market it to them effectively. Divide your application portfolio by business processes, and work together with the business process owners to understand the criticality of their applications, as well as their related costs and risks.

#### Define the opportunity through business

**case briefs.** Do not fall into the trap of cutting expenses across the board by some pre-determined percentage. Instead consider a complete set of business case elements addressing the individual needs of your business processes and application systems and don't ignore the tax and accounting implications of spending as they may lead to unforeseen financial consequences.

Adopt a business perspective when deploying the strategy. The best place to start the strategy development is in the IT organization. This organization needs to continuously improve the ALM process and tools, and train and support the application owners as they drive it. In doing so the IT organization acts as a business partner rather than an IT supplier.

Secure stakeholder commitment and buy-in. Maintain regular communication with business stakeholders, senior executives, business process owners and users, to help them understand the implications of the ALM approach. Avoid surprises and do not assume consensus.

Establish a strong program management and governance capability. From the beginning, track the initiatives and their progress. Take early action to head off conflicts and remove roadblocks. This is a situation where "an ounce of prevention" is truly worth "a pound of cure".

## HOW KPMG CAN HELP

KPMG member firms offer a number of capabilities for application rationalization and lifecycle management. Recognized by clients for our focus on creating business value by balancing cost, performance and risk. We also have industry knowledge and insights to help align IT functions with business processes.

As a result, we can assess application portfolio challenges with a top-down, business-centric approach that leverages tools and market comparators to analyze costs and savings at an aggregate level. We also have broad experience in business transformation and its critical importance in defining application standards and strategies, assessing functional portfolios, and providing guidance for IT leaders. Equally importantly, we provide a valuable understanding of global standards and key metadata for applications; as well as the ability to implement application portfolio governance processes and incorporate them into an organization's overall IT governance model.

# CONTRIBUTORS

With thanks to the following subject matter experts for providing their input and guidance on this paper.

Justin Hoss is a principal in the U.S. firm's Chicago office

Sami Hasan is a director in the U.S. firm's Chicago office

Craig Symons is a director in the CIO Advisory Global Centre of Excellence

Marc Snyder is managing director of the CIO Advisory Global Centre of Excellence.

# CONTACTS

### Matt Bishop

CIO Advisory North America T: +1 214-840-2749 E: mbishop@kpmq.com

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Bob Hayward ClO Advisory Asia Pacific T: +65 8151 4192 E: bobhayward@kpmg.com.sg

Lisa Heneghan CIO Advisory EMEA

**T:** +44 7718 582368 **E:** <u>lisa.heneghan@kpmg.co.uk</u>

### Marc E. Snyder

CIO Advisory – Global Centre of Excellence T: +1 978-807-0522 E: msnyder@kpmg.com

#### **Glenn Tjon**

ClO Advisory Latin America T: +50 7208 0700 E: gtjon@kpmg.com

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