



TECHNICAL WHITE PAPER

5 Proven Ways to Reduce IT Costs Now

“Although all organizations face strong, periodic pressures to reduce their expenses, the 2008 economic climate has made cost reduction a near-term priority for many businesses.”

Managing Application Budgets: Practical Ideas for Reducing Expenses, Gartner, May 2008

“Moving COBOL implementations to packages or other languages is a long-term and relatively high-risk proposition.”

IT Modernization: The Changing COBOL Market Could Affect Your Decision, Gartner, August 2008

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“The ability to provide our customers and the customer service staff with rapid and accurate access to information is core to our business. SOA Express has enabled us to deliver Web and desktop access with dramatically improved performance on our platform of choice”

Keith Wild, Director of Internal Resource Management, Blue Cross Blue Shield of South Carolina

Executive Overview

Continued economic slowdown is placing organizations under enormous pressure to use existing IT assets more effectively. Budgets are shrinking¹, but IT departments are still expected, perhaps more than ever, to deliver the increased business value required for growth.

Providing much-needed innovation and process support without jeopardizing business continuity or application stability, and without undermining crucial strategic investment, is the delicate balancing act facing CIOs globally.

The application portfolios responsible for running most core business processes today, including 90% of all transactions within the financial services sector², are mainframe-based. The vast majority of these are written in COBOL and continue to provide the high-value, high-performance business-processing backbone expected within today’s global 2000 companies – and yet years of neglect, with many companies too focused on “parochial, non-strategic work”³ have resulted in higher than necessary costs and creeping inefficiencies.

Companies adopting a broad approach to IT modernization can dramatically reduce their IT costs, while boosting productivity and releasing considerable resources for new development. With activities centered on simply ‘keeping the lights on’ consuming in excess of 70%⁴ of IT budgets, the need for greater operational efficiency in application maintenance and infrastructure support is paramount.

The five measures discussed in this paper represent key proven ways for an application organization to reduce its on-going costs without compromise. But, as ever, there is no ‘silver bullet’. Cost and efficiency must be tackled across the entire IT landscape, with the goal of identifying tangible and realizable opportunities for improvement. Independently, each of these measures can deliver significant benefits, but brought together in a cohesive modernization strategy, they offer a way to release much needed value and innovation in today’s difficult economic climate.

1. Deliver more efficient business processes by re-using existing functions
2. Increase existing programmer productivity by 30 to 40%
3. Consolidate applications from non-strategic platforms onto z/OS
4. Move mainframe batch processes or online applications to alternative environments
5. Rationalize mainframe infrastructure and languages

1. Deliver more efficient business processes by re-using existing mainframe functions

An organization’s business processes are, in most cases, totally reliant on its technological infrastructure. But for companies with huge IT investments stretching back decades, this reliance is based on aging applications whose performance has led to a growing frustration

¹“The State of Enterprise IT Services: 2008”, Forrester, September 2008

²“The Future Of The Mainframe”, Ovum, October 2005

³“Develop Metrics Thoughtfully To Streamline Application Portfolios Successfully”, Forrester, July 2008

⁴“IT Modernization: The Changing COBOL Market Could Affect Your Decision”, Gartner, August 2008

“We can deliver more system capability to our clients because we have saved money and improved our own productivity. We estimate our overall cost savings from improved productivity to be 40 percent.”

Jay White, Director, CSC Financial Services Group, Life Services Division

from the business that IT is no longer able to support its needs. And yet, it is these very same applications upon which the company's success has been built, and in whose code the competitive advantage and business ingenuity for future growth lies.

In actual fact, these applications represent a tried and trusted set of highly stable business components, and are vital weapons in every organization's battle with IT costs. In utilizing them, IT organizations no longer need expose the business to highly-disruptive replacement initiatives, many of which (even to this day) fail to deliver the required business value.

The rise of service-oriented architecture (SOA) adoption to a point where at least 63% of enterprises will be using it by the end of 2008⁵ is in large part due to its relevance to existing applications. With its emphasis on reuse, the adoption of SOA and Web service-enabling technologies is helping companies extend the useful life of existing, well-proven functionality in new ways, reducing integration costs, and dramatically improving the time taken to support business process changes – for example, Web 2.0, mobile communications and the pursuit of greater levels of information exchange between business unit silos.

2. Increase existing mainframe programmer productivity by 30 to 40%

Technological evolution at home and in the workplace has led to productivity benefits that would undoubtedly have made previous generations envious.

Unsurprisingly, the business of managing IT has seen its equal share of advancement and innovation, delivering dramatic gains in all aspects of the development life cycle.

And yet, many companies are still supporting their mainframe-based enterprise applications using tooling that has changed little since the 1980s, often when the programs they are maintaining were first created. In a recent report⁶, Gartner stated that TSO/ISPF remains “the dominant development environment” for COBOL applications, and urges companies to “start investing in newer IDEs that leverage the productivity of workstations.”

Today's mainframe development teams can exploit contemporary Windows-based integrated development environments (IDEs) to perform the majority of their analysis, development and testing tasks. Companies already using this approach can attest to significant annual cost savings from a combination of reduced mainframe CPU usage and increased developer productivity, with as much as 40% savings being realized through increased productivity alone⁷. Another customer⁸, who has studied the benefits of modern tooling on their application analysis activities, has reported savings in excess of 8 full-time employee equivalents for just this phase.

Furthermore, through improved analysis and testing of application changes, there is an increase in code quality which takes the potential for cost savings still further. The Standish Group, in studying the impact of application downtime⁹, reports the average cost per application bug to be \$50,000, while the cost

⁵“SOA Adoption: Budgets Don't Matter Much”, Forrester, April 2008

⁶“How Today's Application Development Organizations Can Manage Retiring IT Skills”, Gartner, July 2008

⁷CSC Extracts More Value from Legacy Assets with Micro Focus, Micro Focus case study

⁸Proof Positive: Analysis Tools Reduce Application Support Cost, Micro Focus white paper

⁹“Trends in IT Value”, The Standish Group, 2008

“This is a really impressive migration; the cost savings we have experienced since moving our entire application portfolio over to the IBM mainframe have been exceptional.”

Dr. Lansbeat Loacker, Managing Director, UBS

for production application downtime ranges from \$12,000 per minute for e-commerce applications to \$73,000 per minute for trading applications. Its final category of ‘cost per lost transaction’ clearly reinforces the ‘iceberg’ factor, with many of the significantly higher potential costs lying buried beneath more obvious results .

3. Consolidate applications from non-strategic platforms onto z/OS

For many large companies, merger and acquisition activity has resulted in the IT organization managing and operating multiple vendors’ mainframe and mid-range environments. This has brought significant challenges for IT, with large portions of available budgets being squandered through resource fragmentation, development silos and application integration obstacles.

Platform consolidation to a single, unified environment provides IT departments with a very real alternative for removing non-strategic platforms from the organization.

Companies whose IT landscapes include ‘end of life’ platforms, such as VAX, VSE and Unisys, to name but a few, can consolidate applications on to their z/OS mainframe and experience significant reductions in operating costs and greater adherence to their strategic IT architecture. Furthermore, the reduced requirement for skills from a diminishing, and therefore increasingly expensive, resource pool adds to overall benefits from both a cost and risk perspective.

Additional cost savings, as well as improved environmental performance, can also be achieved through the consolidation of an organization’s mid-range server sprawl. At the launch of IBM’s

z10 mainframe in early 2008, Steve Mills, senior vice president and the group executive in charge of IBM’s Software Group, celebrated the mainframe’s ability to replace as many as 1500 underutilized x86 servers, and do so with an 85 percent reduction in floor space, an 85 percent smaller energy bill, and with a 30 to 1 consolidation of software licenses.

The migration of valuable applications to the consolidated platform can at first appear complex and costly. However, through the use of specialist automation tools and services to assist in the code and data conversion, the move can be carried out in a low risk, highly optimized manner. One financial services organization was able to complete their migration three months early through the use of such services, bringing combined savings on the project in excess of \$80m. The value of the consolidated platform extends the benefits still further.

4. Move mainframe batch processes or online applications to alternative environments

IBM mainframes have historically been the natural choice for mission-critical business applications. However, with the rise in power, security, robustness and scalability of Windows, Unix and Linux-based servers, alternative platforms are now available. These platforms offer very attractive price/performance ratios, especially when compared with small and mid-size mainframes, whose high operating costs per unit of processing present a compelling driver for many of today’s IT departments.

This rise of server alternatives, combined with the fact that it is now possible for companies to run z/OS application workload on Windows, Unix and Linux

"Our aim was to reduce costs without compromising performance or impacting our end-users and the automated conversion provided by Micro Focus was key to enabling the bank to achieve these objectives while reducing the overall risk of the whole project."

Banca Intesa

(including zLinux) means that IT organizations enjoy a range of choice that has not previously been available.

Many companies, for whom the mainframe no longer represents a strategic investment, or who need to reduce CPU utilization to avoid upgrade costs, are choosing to migrate applications to lower cost platforms. Companies like Daimler Chrysler, whose South African operation was able to reduce annual hardware and software costs by 50%¹⁰, and digital printing specialist Vestcom, which was able to achieve an annual return on investment of \$500,000 dollars, with CPU and DASD outsourcing costs cut by 75%¹¹.

Even companies with a continued strategic investment in their high-end IBM mainframe, and the applications it supports, are finding enormous cost and flexibility benefits in deploying elements of their portfolio on to non-mainframe servers.

Tesco, the world's third largest grocery retailer, was able to accelerate its international expansion strategy through deployment of its innovative z/OS-based replenishment system on AIX. This has allowed it to maintain its highly effective, centralized operating model but at a fraction of the cost, both in terms of rollout and on-going operating costs¹².

5. Rationalize mainframe infrastructure and languages

The relentless progression of technology, especially when combined with a company's merger and acquisition activities and the rise of departmental business solutions, has ensured the build-up of layer

upon layer of complexity, duplication and redundancy within the enterprise application portfolio. This accumulation of "assets" is further compounded by a lack of understanding of where the value really lies within the IT landscape, and which items it is therefore prudent, or indeed safe, to discard.

As Gartner states:¹³"Departmental and divisional responsibility for application procurement leads to a proliferation of tools doing the same job, creating dis-economies of scale and fragmented systems." It is vital that companies enhance their understanding of the value of what they have, and then seek to remove the elements that are no longer appropriate.

Rationalizing infrastructure elements, such as moving to a single database or transaction system, enables greater efficiencies in licensing and resourcing, while reducing the inherent complexity of the portfolio.

Similarly, paying maintenance teams (or outsourcers) to support under-utilized or redundant applications erodes the business value of the IT operation.

Understanding where the value lies enables the IT operation to focus on removing the 'dead wood' and nurturing the healthy growth opportunities.

This approach can be further refined and extended to development languages. With skills availability at the forefront of many senior IT executives' minds, being able to reduce the diversity of skills dependencies brings enormous benefit in terms of reduced risk and cost, such as better utilization of development teams, reduced reliance on high-cost (and depleted) skill sets, and greater economies of scale on application deployment costs.

¹⁰http://www.microfocus.com/000/DaimlerChrysler_tcm21-4373.pdf, Micro Focus case study

¹¹http://www.microfocus.com/000/Vestcom_tcm21-6467.pdf, Micro Focus case study

¹²http://www.microfocus.com/000/Tesco_highres_US_V2_tcm21-15509.pdf, Micro Focus case study

¹³"Managing Application Budgets: Practical Ideas for Reducing Expenses", Gartner, May 2008

Examples of language rationalization include the conversion of IDEAL to COBOL, where an organization might have a smaller pool of IDEAL but a much larger deployment of COBOL. Being able to migrate valuable IDEAL applications in this way ensures their continued development and relevance to the business.

Conclusion

Through a combination of advances in platform technology and application tooling, opportunities for companies to make dramatic reductions in their IT costs continue to present themselves. Individually, they represent crucial elements in the battle against shrinking budgets and the onward creep of cost and complexity. But when combined as part of a strategic approach to IT modernization, and when used in conjunction with careful portfolio planning, they will enable the most cost-constrained of IT operations to liberate vital resources for new development work, innovation and increased levels of business growth and alignment.

About Micro Focus

Micro Focus, a member of the FTSE 250, provides innovative software that allows companies to dramatically improve the business value of their enterprise applications. Micro Focus Enterprise Application Modernization and Management software enables customers' business applications to respond rapidly to market changes and embrace modern architectures with reduced cost and risk. For additional information please visit www.microfocus.com.

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