White Paper

The Case for Applications Transformation: ***Harnessing Applications for Innovation and Agility***

INTRODUCTION

C-level executives are looking to innovation and agility to ease pain points in the IT environment, according to recent research[1]. However, innovation takes resources—and although updating the infrastructure with cloud computing and virtualization helps control hardware and software expenses, it isn't enough. To create and maintain an environment that supports the innovation and agility they say is their top priority, IT leaders need to turn their attention to another cost center: applications.

For the first time, applications have passed hardware as the top IT expense. At the same time, though, they've also become key drivers of business growth, as applications and the services they provide are the key touchpoint between IT and the business. To make the most of their applications investments, organizations must now assess whether their portfolio and processes are capable of addressing business challenges and exploiting opportunities in areas such as mobility, integration and sourcing strategies. This white paper discusses why applications are necessary for greater business agility and innovation, how they have come to play such a critical role and what IT needs to do to create and implement a world-class approach to leveraging applications for business benefit.

CIO Custom Solutions Group

[1] Research conducted by Coleman Parkes Research, March to April 2011, consisting of nearly 500 interviews with CIOs, IT leaders and directors and senior IT managers from 1,000+ employee companies and the U.S. government. HP sponsored this research, but that fact was not known to respondents.

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// PAIN POINTS

Aging legacy applications are a long-standing problem. These applications have been in place for so long that they span multiple application languages and infrastructure platforms; cross operational and geographic divisions; and affect most, if not all, business-critical functions. Keeping them operational has become increasingly hard as the people with expertise in maintaining them move on or retire. Updating them is even more problematic; the inflexible coding and connectivity that often cement legacy applications into place make it difficult, if not impossible, to leverage modern technologies such as mobile and cloud-based systems. Bringing them up to date is as necessary as it is challenging.

Further complicating matters, many organizations have traditionally focused on building and testing an application without considering the total lifecycle and operational cost of ownership. This tends to trap organizations in unanticipated resource requirements and budgets over time, tying up resources they might otherwise direct toward agility and innovation.

Meanwhile, the lack of organization governance has made it easy for users, business units and geographies to install and use their own applications. This ongoing and growing complexity further adds to the struggle to manage and govern the application environment.

Most critically, IT must tackle all these challenges and meet business demands for greater responsiveness while facing a shortage of resources. Numerous market studies reveal that the average organization spends more than half of its software budget—and some spend up to 90 percent—on maintenance and operations alone. This leaves IT confronting a daunting task: redirecting scarce resources toward driving business value without sacrificing core IT services.

// THE KEY TO INNOVATION: APPLICATIONS

Given these pain points, IT has to make strategic decisions about allocating its resources to prioritize innovation. Transforming the application environment to deliver services with greater flexibility and agility is a high priority. However, with substantive budget increases unlikely, IT's only option is to "flip the ratio"—that is, shift spending away from maintenance and operations and toward innovation instead.

Emerging infrastructure strategies and technologies offer new opportunities to deliver greater value at lower cost, but the organization's ability to take advantage of these opportunities depends directly on how well its applications can leverage them. Unfortunately, most organizations must contend with rigid legacy applications that were never designed for flexibility or integration. In converged infrastructures, many of them run poorly or not at all, making them poor candidates for migration to cloud or mobile platforms. To support business goals and objectives, IT must ensure a smooth evolution to more-modern applications in a more integrated environment.

IT can approach creating this environment strategically or tactically. The strategic approach is to launch an applications transformation initiative that aligns the entire applications environment and portfolio with the organization's strategies. The tactical approach involves an applications rationalization project that addresses just the applications portfolio itself, for fast, significant savings. In both cases, IT needs to begin by taking a complete inventory of applications, including total cost of ownership, and then mapping out actionable projects that align with strategies. The best action plans always begin with clarity about both the current environment and the desired results.

// APPLICATIONS TRANSFORMATION: INTEGRATION AND MOBILITY

In the HP survey referenced earlier, C-level executives said their top business goals were meeting changing customer demands, producing higher-quality products and services and increasing efficiency. Two areas in particular hold the greatest promise for leveraging applications to reach all these goals: integration and mobility.

INTEGRATION

As organizations increasingly interact and share data with customers, suppliers, partners and other third parties, migrating data from legacy applications into a more modern environment is ever more critical to business success. In fact, IDC estimates that by 2010, 85 percent of net new enterprise applications will be specifically designed to be accessed in the cloud. To prepare for this necessity, IT needs to focus its innovative energy on improving existing applications, replacing manual processes with automation and exposing existing data and software through better integration.

Virtually every business process can be improved by seamless integration of data, applications and processes. Integration creates a "single view of the truth" to improve both business efficiency and the customer experience. Organizations can then use business intelligence to reveal new opportunities to cut costs, streamline operations, improve customer service and capture new sources of revenue.

MOBILITY

Mobility is reshaping the world of business as well as the world of applications. Employees and third parties alike now expect ubiquitous, instant-on access to information, whether they're working from a remote office or placing a customer service request. Multiple points of contact, devices and technologies—not just laptops and smartphones but also sensors, social media and other location-based and location-aware services—generate the vast torrents of data that drive this self-service environment. For the true value of that data to be unlocked, though, it must be integrated with other systems.

Mobility can deliver a potentially game-changing competitive advantage: delivering data wherever it's needed, on demand. (Consider, for example, how companies in the package delivery industry have transformed customer expectations with real-time package tracking and management tools.) To take full advantage of mobility's promise, though, IT needs applications that are robust and flexible enough to accommodate increased demand from more users for access to more data in more ways. Modernizing mission-critical processes and applications with automation and as-a-service models may be the most agile way to improve quality and shorten time to delivery in response to changing demands.

// SOURCING AND DEVELOPMENT STRATEGIES

In a world of 24x7 online access; complex supply chains; and a mobile, global workforce, the "own everything, run everything" applications model is too limited to operate across geographies, technologies and systems. Keeping up with new technologies and innovations is costly and time-consuming, with a substantial learning curve that prevents IT from responding quickly and effectively to market changes. Organizations need to modernize their application portfolios to free up resources, improve quality of service and reduce time to market. However, almost 80 percent of C-level executives say they lack the resources and skills necessary to create a more effective, productive enterprise applications portfolio in-house.

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Forward-thinking IT leaders are addressing this challenge by exploring other alternatives for applications development, testing, governance, management and service delivery. Managed services, hosted environments, applications services partners, virtualization and cloud-based services are affordable elements of an effort to add value, expertise, knowledge and skills while lowering the total cost of ownership, both up front and throughout the application life cycle. Other transformational assets—including automation, tools, business-level agreements and consumption-based models—further reduce complexity and decrease hardware and software requirements, freeing IT resources for more-innovative uses.

Replacing the DIY model with a strategically planned mix of sourcing and development strategies enables IT to jump-start necessary development and improve performance for higher-quality service and shorter time to market. By taking a more holistic approach to procurement and delivery, IT can make systems more flexible, boost the efficiency of processes and transactions, strengthen security, ensure regulatory compliance, simplify governance and improve the customer experience. Working with an applications services partner can shorten time to results and reduce the learning curve while freeing up internal staff to focus on business priorities and innovation.

// *CONCLUSION: NEXT STEPS*

In an economy driven by the urgent need to innovate for competitive advantage despite limited resources, IT must add significant value to the business—so IT needs to rethink applications with an eye toward greater flexibility and agility. That requires a comprehensive approach that includes not just examining the application portfolio and the infrastructure but also evaluating governance, development, testing and management as well as the broader strategies and environments supporting those key systems.

Applications have become the heartbeat of today's organizations, helping them find and exploit new opportunities; drive operations; and manage relationships with customers, suppliers and partners. Failing to modernize applications has real and significant costs in terms of poor performance and lost opportunities. Although small local efforts can deliver measurable results in easing pain points, HP's research finds that organizations achieve the best balance of cost-effectiveness, speed and quality of outcome through enterprise-wide applications transformation efforts.

The majority of IT organizations lack the resources, skills, experience and specialized training necessary to plan, launch and sustain such initiatives. Instead of putting off application modernization until some indefinite future budget increase, it may be wiser for them to work with an external partner with proven experience in transforming applications into modern, agile environments. Leveraging the frameworks, processes and resources of a strategic partner helps organizations take a logical, cost-effective pathway to transformation and flip the ratio of IT spending from maintaining the status quo to forging the flexible, innovative enterprise of tomorrow. ■