



# Strategic Snapshot

## A to zSeries for System Integrators

### Opportunities for Business Success

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# A to zSeries for System Integrators: Opportunities for Business Success

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## ABSTRACT

*Why are System Integrators important to the industry as a whole and to vendors in particular? While at one time it was the norm to buy a monolithic, vertically integrated, and custom-built computing solution, the reality of today is quite different. Although single-sourced custom-built solutions had their advantages including a team of proficient technological experts and a singular attention on the customer, as well as one point of contact for problem resolution, this approach was costly and left the customer having to accept the capabilities, no matter how good they were, of a single vendor.*

*Over time, the notion of integrated best-of-breed computing solutions sourced from myriad providers has replaced the monolithic single-vendor approach for most, and with good reason. Best-of-breed solutions tend to imply specialization, a point focus from the vendor who can amass the deep technical and business expertise requisite in today's increasingly risk-averse business climate. These vertically focused software stacks are often produced by specialists who are smaller in scale than mass market vendors and who therefore have not only expertise, but the business imperative of listening to their customers in order to provide the best possible component of a larger solution. This creates a productive symbiotic relationship, as customers do not have the luxury of becoming experts in all aspects of IT, and in many cases would simply prefer that IT be a service that is provided by a third party.*

*In this paper, we examine the role of Systems Integrators in helping organizations benefit from their technology investments. We also examine the capabilities of IBM's eServer zSeries and reflect on how this platform provides opportunity not only for the end customer, but also for the Systems Integrators who play an invaluable role in delivering IT solutions in the marketplace.*

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## The Role and Value of Systems Integrators

Systems Integrators (SI) play a vital role in matching the capabilities of vendors with end customers by acquiring a level of customer knowledge that surpasses all but the largest direct vendor engagements. SIs act as customer advocates for multiple vendors, and can aggregate customer demands to garner vendor attention and resources. SIs can also reverse the process by identifying opportunities for vendors with the integrator's customers. This is in part driven by the fact that SIs develop a trusted partner status, whose input is valued by their customers and are seen as an independent third party focused on the customer's as opposed to the vendor's needs. In addition, integrators provide (although usually not at the integrator's insistence) political cover for IT undertakings that are viewed as more risky by corporate management since these integrators have a verifiable record of achievement.

### The Vendor Benefit of Relationships with Systems Integrators

Systems vendors, such as IBM, derive a great deal of opportunity and business value from their partnerships with third parties. SIs through their geographic, business, or technological expertise benefit their suppliers by delivering specialized knowledge of real-world customer needs across several demographics. Integrators also act as a neutral messenger bringing honest feedback from customers about many vendors' product successes and shortcomings. In addition, vendors gain insight into competitive capabilities, customer pricing sensitivities, and other competitive information that would be difficult, if not impossible, to develop in-house. Thus, SIs act as a trusted partner to the vendor community, to custom fit solutions and provide specialized expertise for market niches outside the traditional reach of vendors.

## The State of IBM's eServer zSeries and Its Role in the Marketplace

The IBM eServer zSeries and its antecedents are a mainstay of corporate IT. No other platform can claim the breadth of information stored, longevity, and strategic value to organizations worldwide. zSeries continues to influence how IT is designed and deployed through its sheer number of deployments and heritage. zSeries is by no means the stodgy mainframe of 1964; it has remained technologically current and is a forerunner of future technology directions including:

- ◆ Logical Partitioning of CPUs into fractional-sized processors each with its own discrete and secure execution environment;
- ◆ Resource Virtualization whereby all computing resources can be viewed seamlessly as resources available to applications without concern for their physical location;
- ◆ Support for Linux, Java, and other state-of-the-art execution environments;
- ◆ Unparalleled system utilization, management, and world-class security

### A Driver of Technology across the eServer Portfolio

To many, a gold standard solution should remain just that: highly differentiated, expensive, and the sole provider of state-of-the-art technological capability. IBM has wisely taken a different tack, one that continues to provide state-of-the-art enterprise class computing in zSeries, but also seeks to drive innovation in IT across its family of offerings and the industry as a whole. Thus, it is not surprising to find that technology that was originally developed on zSeries finds its way to other IBM platforms. Some examples of this would include the previously mentioned partitioning and virtualization, as well as on/off capacity and the very nature of on demand.

## IBM eServer zSeries and the Leading Edge of Computing

Given its undisputed position in the majority of worldwide enterprises, the zSeries is well positioned to drive the future of computing, not only at the top, but also throughout the IT market. Ideas that today are only feasible at the high end become the dreams of the mass market: customers eventually demand these be delivered down-market as well.

zSeries offers SIs and users unique capabilities and/or approaches to solving many of the pressing IT issues organizations are facing today. In particular, consider the following:

- ◆ On demand: No other platform typifies on demand more than zSeries. The ability to scale up or out all within a well defined and managed structure across multiple OS environments is unparalleled. This is an opportunity for an SI to offer new services focused on moving customers from existing, inflexible solutions towards a more dynamic and responsive business-process focused IT solution.
- ◆ Infrastructure simplification: As the sole solution or as part of the solution, zSeries provides the framework and context for infrastructure simplification that most organizations are seeking today. This is another strong play for integrators. SIs can refresh old technology with new consolidated form factors while also providing virtualization of all IT resources including servers, storage, and applications.
- ◆ Systems management and security: zSeries has decades of experience in securing applications and their systems context. Customers who have made IT a strategic part of their business strategy will not accept anything less than enterprise-class operations.
- ◆ Java zAAP engine: An optimized Java environment provides cost relief by removing workload from the main zSeries CPUs while improving performance of Java code.
- ◆ Virtualization Engine: One of IBM's most significant achievements is in virtualizing all aspects of IT resources thus paving the way for a new architecture and approach to networked computing. SIs can simplify customer infrastructure while easing deployment of new and future applications without regard to the underlying infrastructure.

## How Systems Integrators Can Benefit from Deploying zSeries

SIs that offer outsourced/managed facilities can take advantage of zSeries technology for improved systems management and a lower operations cost. Thus, the quality of customer experience can be increased as well as the operating margins for integrators. At the same time, integrators who provide consulting solutions need not worry about platform obsolescence as zSeries continues to have new applications/solutions ported to the platform. IBM's continued investment in innovation means that zSeries is well positioned to remain on the leading edge of computing and ahead of all comers in the marketplace.

## Large Ecosystem with Broad Support

A community of over 1,300 ISVs and business partners together with 1,700 IBM IT professionals in more than twenty centers worldwide provide pre- and post-sales technical support covering solutions architecture, installation, maintenance, and critical situations. This broad support for zSeries allows integrators to leverage the skills and value of multiple developers and customers within the ecosystem. It provides the basis for developing highly integrated solutions while offering flexibility attractive to new generations of developers who never previously considered the mainframe. zSeries serves the same target market as the integrator community, i.e., strategic deals that involve substantial investment and sizable opportunities for value-added services and support.

## A Proven Platform that Addresses New Opportunity

The long history of zSeries has proven its technology, which can substantially mitigate deployment risk for SIs and their customers. The continued evolution of the platform demonstrates vendor stability and commitment: its architecture is well understood, and many best practices are established from it. This continues to attract known ISVs and developers to the platform. Proven performance and dependability improves the overall chance of a successful deployment. Integrators benefit not only from lowered risk, but also from decreased implementation time. Therefore, more client engagements can be delivered with the same amount of operational overhead, which implies improved operating margins.

SIs can also reduce their own infrastructure costs and the cost of developing and testing solutions, and offer services to help their customers reduce cost and complexity by deploying zSeries solutions. In particular, customers that are seeking to simplify their infrastructure, take advantage of zSeries global virtualization fabric, and/or transform into an on demand business, provide integrators the opportunity to cultivate an additional line of business. zSeries can also leverage Java and WebSphere to modernize existing applications and provide a platform for new Java applications whose underlying data already resides on zSeries. The combination of proven reliability, state-of-the-art capabilities, and improved price performance offers a unique opportunity that benefits integrators and their customers alike.

## Sample Opportunities for Systems Integrators in Vertical Markets

Given all that has been said, one could not be faulted for asking for real-life proof points of SI and customer benefits. Here are some sample industry opportunities that are particularly well suited for zSeries deployment through SIs. The customer challenges will be illustrated, as well as how SIs and their customers are benefiting from making zSeries a part of their solution.

### Finance and On Demand Banking

In this banking instance, contact center service agents could not access account activity online, and financial consultants had no knowledge of transactions customers made through the contact center. The bank wanted to improve customer satisfaction, increase the customer base, and sell more services. It needed a system that would deliver aggregated customer information to all customer service representatives.

The SI provided integration, implementation, banking transformation services, and software running on pSeries front end and zSeries back end. The transformation services included core banking, conversion to a service-oriented architecture, risk assessment and compliance, and customer insight and payment process improvements. The SI integrated the existing back end to the new back end by using flexible APIs, to consolidate retail payments and wholesale payments networks. This resulted in a single view CRM for branch office and multichannel transformation, while complying with regulatory requirements. Although alternative back ends were considered, including Microsoft SQL Server on Windows 2000 and Oracle on Sun Solaris, the SI selected DB2 on zSeries, which provided availability, scalability, and tight integration between DB2 Universal Database and the CRM application.

Because of this SI engagement, the bank now has a 6 million bank account database with the capability to execute more than 300 transactions per second. Service representatives are more responsive in satisfying customers and are effective at cross- and up-selling bank products based on recent customer activity. This engagement highlighted the SI's industry expertise and technological prowess by delivering new value to the bank and its account holders. The customer can now effectively up-sell its customer base, and the SI positioned itself for more business by increasing the bank's revenue per customer.

## Industrial / Construction

In this engagement, the challenge was to replace disparate applications and custom-built interfaces with a standard, group-wide ERP system, for improved efficiency, reliability, and decreased operating costs. To enhance its profitability, this construction company needed to focus on cost control and efficiency. This was made difficult by its existing, obsolete, IT infrastructure, which consisted of multiple independent applications and numerous cross-application interfaces. The operational cost was high, reliability was affecting internal efficiency, and the lack of scalability was crimping company growth.

The company selected SAP software and decided upon an xSeries front end and a zSeries back end with DB2. The SI handled the functional implementation of SAP, and IBM Global Services provided technology consulting and architectural design for the hardware. Both teams worked closely with construction company experts, to ensure knowledge transfer, which provided the SI with valuable, replicable expertise that could be leveraged in future engagements in this industry. Partnering with IBM Global Services helped the SI gain access to a customer and gather skills that they normally would not have otherwise been able to.

Because of this SI engagement, the company now has improved integration, lower IT costs, faster reporting, and the capacity for improved decision making and future growth. Suites of SAP solutions provide centralized accounting, control systems, and materials management, which have generated improved cost efficiency. The infrastructure provides a common platform for new application development, which benefits in-house development but also opens the door for third-party development and support, an opportunity previously unavailable. A blend of zSeries systems and data management tools with well established business processes and existing skills meant that this company could deliver more services and growth with the same personnel resources. This customer took many steps towards becoming an on demand business while providing the SI with industry specific expertise as well as a customer that was positioned for growth and future service engagements.

## Healthcare

Nobody likes inefficiency, but in a hospital, it can mean all the difference to patient care. This hospital needed to deliver critical medical information such as lab results, patient records, prescriptions, drug sensitivities, and clinical notes to thousands of allied health care professionals and administrative employees accurately and within seconds to improve workflow, increase efficiency, and balance costs with the business value, ultimately increasing patient safety. This was impossible with a paper-based system.

The SI provided hardware, software, and consulting services for healthcare solutions and deployed them on a zSeries server that would house mission-critical clinical documentation, ordering, results viewing, patient management, and patient accounting applications.

As a result, the hospital is now nearly 100% paperless, and health care personnel have rapid access to patient information and medical records. Processes such as physician order entry, results viewing, nurse documentation, and patient billing are now integrated with noticeable improvements in patient care. This hospital has moved closer to being an on demand business; the SI developed a marketable solution for zSeries. The burden of paper on any enterprise is enormous, from the inefficiencies of generating, handling, and storing it to the potential for human error. Deploying zSeries as a centralized hub for electronic medical records provides the means for future growth and services opportunities. For example, new applications with barcode readers and wireless access could verify a patient identification prior to medical procedures. The SI now has a record of accomplishment in delivering the paperless workplace and is well positioned to meet a burgeoning need in the marketplace.

## Government

This scenario is a common one: citizens and businesses want convenient access to local government services without having to navigate the complex path between multiple agencies. Bureaucratic duplication of effort also decreased the productivity of government staff.

With the help of an SI, the government developed an e-government solution that transformed the way services are offered. The old system had departmental information silos. The new solution bridges these silos and legacy applications to allow new Web Services to provide access to information from multiple resources within a single user context. The solution is a series of portlets that access Web Services from the various department-specific applications running on a zSeries server. Tight integration of WebSphere products and zSeries back end transaction systems, efficiency of zSeries data connectors together with authentication by Tivoli Directory Server (and other services) means that Web access and Web transactions are fast, reliable, and secure.

The government's open, rapid-integration capability allows it to deploy new services more rapidly. The ability to create common elements and reuse them allowed the government to respond to a 50% increase in visits to its portal, and process over 60,000 electronic payments totaling more than \$4 million, all on a consolidated infrastructure that has reduced the server count from 200 to three. For an SI, this is an opportunity to offer to deploy additional services without service disruption. Integrating Web Services and the legacy system reduced management costs more than 25 percent; the SI has a happy customer with spare monies on its hands. The solution provided the SI with a sale, laid a foundation for future enhancements, and uncovered a potential funding source for these future endeavors.

## IBM eServer zSeries: Leveraging a Legacy for Business Success

The IBM eServer zSeries leverages four decades of IBM mainframe presence and commitment to performance that has culminated in unsurpassed technical leadership. This long-established aptitude combined with state-of-the-art capabilities including partitioning, virtualization, and support for Linux and Java, amongst others, positions the zSeries as an ideal migration or consolidation platform for most any mid- to large-sized customer. As zSeries is a globally recognized IT platform, SIs can leverage IBM's trusted offerings on a worldwide basis. SIs can also leverage the skilled ecosystem of technical support, ISVs, and partners to provide solutions that will meet — even exceed — the needs of most any vertical in any geography.

IBM's Linux leadership and enhanced capabilities of the Linux 2.6 kernel means zSeries can exploit Open Source opportunities while delivering an execution environment with unparalleled stability, manageability, and operational efficiency.

IBM's zSeries solutions provide SIs numerous methods with which to improve their offerings, solidify or enhance relationships with existing customers, and drive new business worldwide. The improved TCO offered by zSeries can potentially free up budgets for further engagements with the SI, who now holds the incumbent position with proven economic and business value.

zSeries is the latest iteration of a known, proven, dependable, continually evolving computing architecture. This achievement and commitment to the future lowers recommendation and implementation risks for the SI when positioning zSeries as a viable solution base to its customers. The zSeries' outright leadership in numerous applications and industries, and its growing influence in many others make zSeries the gold standard by which IT is measured.