WHITE PAPER

Accelerating Solution Deployment with IBM PureFlex and Flex System

Sponsored by: IBM

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EXECUTIVE SUMMARY

Today's competitive business environments are placing heavy demands on IT organizations to accelerate the pace of developing and deploying applications. Success in the dynamic global market arena requires speedy delivery and quick time to market for new applications as well as agility in reacting to market changes and deploying frequent product refreshes and updates. To meet these needs, many IT organizations, including those in enterprises, service providers, and ISVs, are choosing integrated systems solutions to accelerate the deployment and time to value of new solutions and applications.

Integrated systems are specifically designed to provide IT resources and management environments that

Business Value Highlights

☑ **Faster time to value:** IBM PureFlex System was deployed 55% faster than conventional systems.

☑ **Accelerating application deployment:** Deployment time for new applications was reduced by 75%.

☑ **Enhanced application performance:** Utilization rates improved by 25%, and downtime was reduced by 97%.

☑ **Optimized business productivity:** Faster time to market, increased utilization rates, and higher availability combined to raise end-user productivity by 5% and helped lower cost and increase revenue.

are more efficient and flexible than those currently found in most traditional datacenter architectures.

IDC interviewed 10 IBM customers and partners that are using IBM PureFlex System or IBM Flex System to optimize the deployment and operation of critical business applications. On average, the organizations in this study realized over $136,000 in annual benefits from increased end-user productivity and over $217,000 in revenue benefits. The financial benefits are driven by the following:

☑ **Faster time to value:** Companies in this study were able to deploy IBM PureFlex System 55% faster than conventional systems.

☑ **Accelerating application deployment:** Companies in the study were able to reduce their time to deploy new applications from 3.4 weeks to 4.2 days, a 75% improvement.

☑ **Faster time to deploy new services:** Companies in the study were able to reduce the time needed to deploy new services by 77%.

SITUATION OVERVIEW

As companies become more reliant on critical applications to manage business processes and to interact with their customers, the time to market for new solutions becomes a key success factor for the business. Over half of the organizations in the study cited accelerating new application development and deployment as an operational objective for deploying IBM PureSystems solutions.

IBM PureSystems family is a portfolio of expert integrated systems built from the ground up to deliver an optimized hardware and software platform. Integrated systems combine compute, storage, networking, and management into factory pre-configured and pre-integrated solutions. PureFlex provides an infrastructure system, and PureApplication and PureData are optimized for specific application and customer workload environments and provide platform systems. IBM PureSystems thus provide a broad range of infrastructure and platform systems with built-in expertise.

- ☑ IBM PureFlex System — a member of the IBM PureSystems family — is a pre-configured, fully integrated infrastructure system with unified management of compute, storage, networking, and virtualization resources to support a range of general-purpose datacenter requirements.

- ☑ IBM Flex System — the components that are used to build several of the PureSystems — can be bought separately as the destination capability for those seeking a blade infrastructure. Encompassing compute, storage, and networking, IBM Flex System provides substantial management and deployment advances due to leading management capabilities with Flex System Manager.

This IDC white paper discusses how several IBM customers and partners are using IBM PureFlex System or IBM Flex System to accelerate and optimize solution deployments. The document concentrates on IBM PureFlex System — the expert integrated system — to highlight particular time to value from an integrated systems approach.

USER CASE STUDIES

Capgemini Accelerates Applications with IBM PureFlex System

As a worldwide service provider, Capgemini is very focused on the speed of service delivery and the cost of IT infrastructure and staff. Capgemini found that IBM PureFlex System could be deployed and provisioned more quickly than traditional datacenter computing and storage solutions that require more extensive onsite integration and testing.

IBM PureFlex System was able to deploy applications much faster than the previous solution. For example, the time needed to provision a new partition and deploy a new SAP ERP application decreased from three days to a half day, an 83% reduction in deployment time.

For migration of an application with a large database from an older system, the company was able to fully activate IBM PureFlex System and accomplish data and workload migration within 8 weeks rather than the 12 weeks it would have expected to need using traditional solutions (a 33% improvement in time to market). Beyond the

physical hardware integrations, Capgemini benefited from creating SAP and virtual appliance templates to standardize and speed application deployments using built-in automated provisioning tools.

In terms of day-to-day operations and customer support, Capgemini estimates that faster application provisioning, improved compliance with configuration standards, and reduced need for scheduled downtime and patching have collectively reduced the IT staff time needed to support the SAP hosting environment by 15–30%.

Redcentric Accelerates Cloud-Based Solutions with IBM Flex System

Redcentric is a United Kingdom–based managed, hosted, and Internet service provider. Recently demerged from Redstone, Redcentric delivers ISP and cloud services to a wide range of U.K. organizations using multiple U.K. and international datacenters. Redcentric implemented IBM Flex System as the core platform to enable its infrastructure-as-a-service (IaaS) solution.

The IBM Flex System investment was seen as highly transformational for Redcentric. It allows the company to meet customer requests for hosting a wide variety of operating systems and applications on a shared common cloud platform. Using IBM Flex System, Redcentric is able to rapidly spin up new resources as customers demand them. Rather than waiting six weeks or more for availability of workloads on physical servers, Redcentric's cloud service customers can self-provision virtual resources on IBM Flex System in minutes. The built-in IBM Flex System Manager capabilities have helped reduce administration costs by up to 50% and cut system setup costs by as much as 66%.

Agilisys Selects IBM PureFlex System for Application Deployment and Hosting

Agilisys is a large United Kingdom–based IT, consulting, and business services provider with a diverse customer base spanning the private and public sectors. The company develops, hosts, and supports a variety of applications for its clients, including support for central and local governments that are using Agresso ERP systems. Agilisys chose IBM PureFlex System for new deployments of two financial applications and to serve as a consolidation platform with the ability to accelerate the adoption of additional service in the future.

The company uses IBM PureFlex System to provide centralized shared hosting based on an IaaS model that can support a variety of customer applications and environments. When engaging with a new client, Agilisys often is called upon to assume responsibility for the client's IT assets and operations. To better support operations, Agilisys was looking to consolidate a diverse set of IT environments and applications for increased efficiency and centralized management capability.

Agilisys is using IBM Flex System Manager to efficiently manage the IBM PureFlex System integrated system — server, storage, and network resources — with built-in software that can manage all hardware elements from a common user interface. This is particularly beneficial to simplify operations as Agilisys deploys IBM PureFlex System using colocation facilities.

ProfilGruppen Accelerates Solution Deployment with IBM Flex System

ProfilGruppen AG, headquartered in Aseda, Sweden, and with a workforce of over 350 employees, is a manufacturer and supplier of customized aluminum extrusions. With rapid growth and business plans to increase market share, the company needed to expand its IT infrastructure capabilities to deploy new production systems and support additional employees.

The company chose IBM Flex System to provide increased IT processing power and additional capacity to deploy new production solutions. With an IT staff of only two, the company needed a system with integrated components and simplified operations. Because ProfilGruppen is a supplier to the automotive industry, rapid time to value was a key objective. The company was able to install the IBM Flex System infrastructure in only two days (over a weekend). Installation was accomplished by a single IT manager without the need for special training or use of a consultant.

According to ProfilGruppen, with IBM Flex System, the time to deploy a new server has been reduced by 80%, from 75 minutes to 15 minutes. This has a positive impact on business value by accelerating solution deployment. Before IBM Flex System, IT staff might have had to wait a week before being able to find the time needed to initiate the new deployment. With IBM Flex System, the shorter time to deployment means that IT staff can initiate this task sooner, often saving as much as one week in terms of time to deliver the solution to the customer. This translates into improved agility and business advantage — being able to deliver solutions to customers faster than competitors.

ValeCard Chooses IBM PureFlex System for Business Continuity and Application Acceleration

ValeCard is a Brazilian financial services company with over 400 employees. The real-time nature of credit card transactions means that ValeCard must be able to ensure that customer credit card balances are accurate and up to date across the country 24 x 7. ValeCard must satisfy critical needs for high availability and hot backup for disaster recovery to support this goal and to ensure business continuity.

The company recently chose an IBM PureFlex System with IBM Flex System Enterprise options to host data backup and recovery operations. The choice was based on the ability of IBM PureFlex System to deliver high availability, faster performance, and operational simplicity as a result of its integrated design and IBM Flex System Manager. To date, ValeCard has experienced "zero downtime" with IBM PureFlex System.

Future plans call for hosting additional customer and employee support applications on IBM PureFlex System. ValeCard must continually grow to achieve its business goals. This requires new contracts and new customers, with new products being created all the time. Fast time to market is a key competitive requirement. ValeCard expects to reduce the time needed to bring new products to market from 60 days with other equipment to 2 weeks with IBM PureFlex System.

FUTURE OUTLOOK

It is clear from case study interviews that IBM PureFlex System and IBM Flex System customers are gaining substantial benefits. Based on user interviews, reports of customer experiences, and quantitative ROI analysis conducted by IDC to date, IT organizations moving to IBM PureFlex System solutions in the future should anticipate the following key benefits.

◻ **Faster time to value:** IBM PureFlex System can be deployed 55% faster than conventional systems.

◻ **Accelerating application deployment:** Companies in the study were able to reduce their time to deploy new applications from 3.4 weeks to 4.2 days, a 75% improvement.

◻ **Faster time to deploy new services:** Companies in the study were able to reduce the time needed to deploy new services by 77%.

IBM PureFlex System is purpose built, providing an optimized infrastructure for more quickly deploying applications. From the day the system is deployed, it delivers faster time to value. The benefits of accelerating solutions are being faster to market and delivering higher quality. Applications running on IBM PureFlex System had 97% lower unplanned downtime.

The combination of faster time to market and better quality had a significant impact on the operations of the companies. Employees using the applications experienced a 5% increase in end-user productivity, or $136,352 annually. Companies with customer-facing, revenue-generating applications enjoyed an annual revenue increase of $217,925 (see Table 1).

TABLE 1

New Application KPIs Before and After the Deployment of
IBM PureFlex and Flex System

	Before	After	Savings	% Improvement
Application deployment (weeks)	3.4	0.8	2.6	75
Time to deploy new services (weeks)	0.5	0.1	0.4	77
Downtime hours per year	29.2	1.0	28.2	97
Increase in end-user productivity				5
Annual end-user productivity benefit to operations			$136,352	
Annual revenue benefit			$217,925	

Source: IDC, 2013

CHALLENGES/OPPORTUNITIES

IBM PureFlex System has already demonstrated major benefits to customers. As more organizations consider adopting these integrated systems technologies, some factors may affect the decisions to move forward. One challenge is related to the IT organization's willingness to accept a highly integrated, structured, and automated solution in contrast to the prevailing discrete technology stacks, which are often closely tied to existing IT skills in the datacenter.

Another challenge is IT's tendency to consider best-of-breed component solutions when making infrastructure choices. Integrated systems provide simplicity and quick time to value along a number of dimensions as well as increased agility in deploying new solutions. These integrated systems benefits, rather than the predominance of best-of-breed components, should be the leading drivers of IT decisions.

Moving to an integrated systems solution will often require IT organizations to transition from a multivendor technology approach to a single-vendor solution. A single-vendor solution can be presented as an advantage and positive benefit in terms of unified vendor support, training, and maintenance.

CONCLUSION

Integrated systems represent an important new direction for IT infrastructure deployments. These systems are increasingly being evaluated and adopted by IT organizations that are looking to take advantage of the cost, agility, and performance benefits promised by this type of architecture. IBM PureFlex System integrated systems are significant products in this space with demonstrated benefits to users as shown in this study.

As this marketplace and the underlying technologies advance, it is reasonable to expect that key benefits and competitive advantage will move up the stack from base integrated hardware comparisons to embedded best practices, applications, automation, and specific workload and use case optimizations. Indeed, IDC has already seen cases where the integrated top-level application was the deciding factor in choosing an integrated system.

In this regard, we would expect to see further emphasis on specific use cases and best practices — such as IBM's "Patterns of Expertise" — as key differentiators and points for competitive advantage as the market grows and matures.

APPENDIX

IDC utilized its standard ROI methodology for this project. This methodology is based on using in depth interviews to gather data from 10 companies about their use of IBM PureSystems and then creating a financial model.

The financial model quantifies the following elements of the companies' operations and measures the financial impact of technology on those elements:

◽ **IT infrastructure:** Costs for hardware, software, facilities, power, and related services.

- ⊡ **IT staff productivity:** The value of IT staff in support of the business (Increasing IT staff productivity means reducing the time spent by IT staff in manual support tasks or repair and replacement and freeing up staff time to contribute to business activities.)

- ⊡ **End-user productivity:** The value of end users of business applications (Increasing end-user productivity is measured in two ways — increasing end-user work output and reducing end-user time lost to unplanned downtime, help desk issues, or other performance issues related to technology.)

- ⊡ **Business productivity:** The value of business operations impacted by technology (Measurement includes increasing revenue and/or reducing cost of operations as a result of becoming faster to market or reducing unplanned downtime or other negative impacts on operations.)

IDC uses a set of assumptions to calculate the benefits discussed previously:

- ⊡ Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings.

- ⊡ Downtime values are a product of the number of hours of downtime multiplied by the number of users affected.

- ⊡ The impact of unplanned downtime is quantified in terms of impaired end-user productivity and lost revenue.

- ⊡ Lost productivity is a product of downtime multiplied by burdened salary.

- ⊡ Lost revenue is a product of downtime multiplied by the average revenue generated per hour.

Because every hour of downtime does not equate to a lost hour of productivity or revenue generation, IDC attributes only a fraction of the result to savings. As part of our assessment, we asked each company what fraction of downtime hours to use in calculating productivity savings and the reduction in lost revenue. IDC then taxes the revenue at that rate.

Further, because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

Note: All numbers in this document may not be exact due to rounding.