



# ThinkTank

ISSUE 8: MAY 2008

IT OPTIMISATION

IBM express  
advantage™

## THE POWER OF SIX – NEW SERVER

The new Power6 low-power high-productivity server range from IBM is designed specifically for small and medium-sized businesses and has IT optimisation and virtualisation in mind. The Power6 server has been designed to allow businesses to create up to 160 virtual partitions on a single system, which could dramatically improve utilisation of servers and reduce hardware and utility costs, and maintenance overheads.

The new “virtualised” approach to computing in the Power6 is designed to allow businesses to reduce energy consumption by as much as 80 percent, better manage system growth, and achieve total cost of ownership reductions of up to 72 percent.

The servers are based on the IBM POWER6 microprocessor which provides twice the performance of previous processors. The processors will appear in System i, System P high and low-end servers as well as in blade server versions.

## ONE IN FIVE BUSINESSES LACK BUSINESS CONTINUITY PLANS

New research from IDC, has revealed that 21 percent of the UK's big businesses do not have detailed business continuity plans to cope with threats such as flooding, IT disasters and terrorism.

At the same time, the study revealed that business continuity accountability, whilst still within the IT department's responsibility, is now rising up the corporate ladder to board-level.

Ed Cordin, Consulting Director EMEA, IDC, said: “The research shows that many business leadership teams are now taking notice of the business continuity issue. That is an important development because keeping the business running, come what may, has to be a key board-level concern, not just one of IT. That said, the alignment between aspiration, accountability and decision making still requires significant attention in many organisations. Likewise, organisations that do not possess detailed business continuity plans need to act now.”

## DATA PROBLEMS COST £67 BILLION

Cappgemini's report ‘The Information Opportunity’ paints a bleak picture of how we share and manage data in business. Sixty-three percent of survey respondents faced making crucial business decisions without the correct information on a daily basis, whilst 28 percent experienced this frustration up to five times a day.

This equates to a reduction in performance by an average of 29 percent, which can cost an annual £46bn in missed opportunity, and £21bn in administrative costs.

Ramesh Harji, Head of Information Exploitation at Cappgemini UK, commented: “Organisations are generating increasing volumes of information, but this simply isn't reaching decision makers in time. The UK must begin to value information as a business asset and in doing so ensure that any investments in IT solutions are not just quick fixes, but actively enhance and improve the information culture.”

### WELCOME

Welcome to the eighth edition of ThinkTank, the newsletter that takes a fresh and pragmatic approach to real business debates.

In this issue we look at ways of reducing your IT overheads through IT optimisation.

Virtualisation has gained much interest from businesses and has become synonymous with IT optimisation, but there's more to IT optimisation than just a move to virtualisation and the potential for faster, better servers. IT optimisation is a much wider discipline. You could enjoy cost reduction and performance improvements from your servers, while IT optimisation may also allow you to benefit by looking at how you work with all of your IT equipment, including storage and peripherals.

To discuss IT optimisation, get in touch with your local support team and discover how it could bring cost and time efficiencies to your business.

Marcus Austin  
Editor

[ibm.com/businesscenter/uk/thinktank](http://ibm.com/businesscenter/uk/thinktank)

Produced by **Crimson Business**, Tel: +44 (0)20 8334 1655, [info@crimsonbusiness.co.uk](mailto:info@crimsonbusiness.co.uk) [www.crimsonbusiness.co.uk](http://www.crimsonbusiness.co.uk)  
Publisher Abba Seal **Managing Editor** Marcus Austin **Project Executive** Joanna Franaszczuk

[ibm.com/businesscenter/uk/thinktank](http://ibm.com/businesscenter/uk/thinktank)

# Doing more with

With business costs spiralling, it's time for the IT department to show the rest how they can work smarter through optimising systems, and how this could benefit the whole business

IT has made many improvements to the way we run our businesses, yet it has also become a growing cost in terms of infrastructure, staffing, maintenance and running costs.

There are a few givens in IT: one is that computers will get faster and more powerful; a second is that IT gets more complex the larger your company; and thirdly, although hardware reduces in cost, in terms of processing power per pound your IT infrastructure bills will increase. In addition to the raw hardware costs, you need to consider the increase in utility prices which makes running multiple servers on a 24/7/365 basis increasingly expensive. Factor in maintenance and IT becomes a hefty cost burden.

## MONEY MATTERS

A 2007 Forrester survey revealed CEOs spent 20 percent of their IT budgets on new projects, while the remaining 80 percent was spent on keeping everything running.

Businesses need IT systems that are as flexible and responsive as they are efficient. The reality is, however,

that many infrastructures can be overly complex and costly, with islands of underutilized computing resources. This could dramatically limit your ability to innovate, grow and react with speed.

IT optimisation could be the perfect solution. It is all about the cost of ownership. By using IT optimisation techniques and removing layers of complexity, you could reduce costs, become more flexible and add business continuity.

## GET STARTED

Simplify your business's physical infrastructure. Businesses usually grow organically and that's also true of their IT equipment. A

business may buy a

piece of IT equipment to fulfil a present need rather than for any long-term needs. If you examine your IT equipment there are probably servers, storage and peripherals which are either standing idle or are under-utilised.

The first task in IT optimisation is to look at what IT equipment you own

and then map the equipment for your present and future workloads.

## SORT OUT YOUR STORAGE

A key area for IT optimisation is storage. Many companies will have a mix of systems from different vendors. Each chunk of storage may be associated with a particular business application. This approach tends to increase cost, because while your accounts server system storage might be at half capacity, the email server will inevitably be full, but it's a different system, with a different interface and capabilities so the storage can't be shared. It's the easy way out to buy more storage for the email server, yet this just adds to the overall cost and complexity. A solution is to standardise with one "catch-all" SAN or NAS storage solution from a single vendor: while this can work in the short-term, it's not the most efficient approach. A blanket storage solution is not likely to be the best fit for your business purpose across the board, and by tying into one vendor you're not necessarily getting the price and performance your business needs.

## STORAGE OPTIMISATION

Storage optimisation could pay real dividends. It intends to manage a mixture of storage devices in a consistent way. With a single point of



**IT optimisation could be the perfect solution. It is all about the cost of ownership. With IT optimisation techniques you could reduce costs and become more flexible**

# less



control over data storage it should be simpler to manage, administrators don't have to deal with different interfaces and tools, and you should make better use of existing storage systems.

### SAVE TIME

It's not just about the cost benefits: time saving is another important factor. When you don't have an optimised storage strategy, common tasks such as data moves and disk administration have to take place outside business hours. With an optimised storage environment, you can balance the load across storage systems to take up the slack as you perform administrative tasks - which can take place at 2pm when you're in the office rather than at 2am.

We're not just talking about real-time online disk storage. Offline storage, such as tape, is still a valid data storage option. IT optimisation is all about choice, and the best solution may be a tiered storage strategy that uses disk and tape as required.

Server optimisation, particularly via virtualisation, is one of the recent buzz words and with reason. If you look at the servers within your organisation you'll probably find that they're under-utilised. According to a 2004 Gartner survey, the average server-utilisation is in the 15 percent range for an Intel processor-based server, with UNIX servers slightly higher at between 20-30 percent. So,

## IT OPTIMISATION IN BRIEF

IT Optimisation has the potential to help your business to simplify the management of its IT infrastructure, from reducing servers via virtualisation, to storage consolidation using NAS and SAN.

IT optimisation could enable you to streamline applications and IT processes, with the result that you could significantly reduce both your utility costs and IT management costs.

Other benefits may include:

- Optimised assets and staff productivity with accelerators for management and provisioning
- Increased workflow efficiency to speed up time to value
- Response to changing demand with dynamic resource allocation
- Enabled scalable infrastructure to handle peak demands with variable IT capacity, lowering costs by operating at full capacity only when needed.

in theory, one single server when fully-utilised using virtualisation could be doing the work of six under-utilised Intel servers or three under-utilised UNIX servers.

If you were to install three applications all running on one server, there would be conflicts, and none of them would run as fast as if they were running on their own. However, if you run virtualisation software such as VMware you can run as many applications as you like on a server - providing it has sufficient memory and power - and each individual application will think it's running as a stand-alone.

### ADDED BENEFITS

There are further advantages of running virtualisation on a server. ▶

# ThinkTank

One is the ability to build a server within minutes. On the other hand, if your hardware server was to fail completely, you would need to have a new server built and installed which could take days or longer depending on your supplier.

So if your email server irretrievably crashed, then a stored copy of the email server could be brought up on another virtual server and be back up and running using your new shared storage system. With a virtual set-up you would lose, at the very worst, just a few minutes of emails. By saving on multiple servers you could afford a virtual server off-site that, should your business be hit by floods, storms or fire, could have your business back up and running within a matter of hours.

Server reductions can also be made by swapping from standalone



servers to rackmount blade servers. With blade servers you make savings on the servers internal infrastructure, as they share power supplies, and on cooling as all the units use the same cooling system and are more efficient.

## MAKE SAVINGS

If we look at peripherals, particularly printers, you'll probably discover that there are more personal printers in your organisation than you need. Laser and colour printers are now so cheap that they can be virtually bought with petty cash, however: if you look at the total cost of ownership which includes the costs of toner cartridges, maintenance and support costs, then they can often cost three to five times more than the purchase price to keep.

By replacing all your standalone printers with workgroup devices and Multifunction devices (MFD) you could reduce your overheads quickly

for an initial outlay. If you replace your printers with MFD that scan, copy and fax, you are effectively replacing three separate devices with a single device, so maintenance and power costs are likely to be reduced, and expensive copier contracts can be axed.

## SIMPLE EFFICIENCY

In conclusion, by simplifying your IT infrastructure you could reduce the time and cost of managing it. With simpler IT you may improve your operating efficiency by making better use of the equipment you own, and reducing the amount of IT resources that sit idle. As a result, you could retain usable equipment for longer and gain greater value out of your investments. And, when the time does come to expand your network, or your desktop or server estate, you can have the confidence to do so in a measured, sustainable and logical way.

*Find out more: [ibm.com/businesscenter/uk/](http://ibm.com/businesscenter/uk/)*

## NEW IBM BLADECENTER JS12 EXPRESS BLADE SERVER



Last year IBM announced IBM BladeCenter S, a chassis designed for small office and distributed environments. BladeCenter S extended the benefits of BladeCenter beyond the data center and it's now been extended with the April 1st launch of the IBM BladeCenter JS12 Express blade server.

The JS12 Express server is a low-cost blade server based on the new Power6 processors (see p.1) and is a little brother to the BladeCentre JS22 Express server. The JS12 is

a single-socket, single-core blade server that supports AIX 5.3, i5/OS V5R4M5, and Linux 2.6 from Red Hat and Novell.

If you like the sound of the JS12 but finance is a barrier, IBM has redeveloped its Global Financing products.

IBM Global Financing may help you acquire the IT you need – from any vendor – and wrap all the hardware, software and services into one total solution and payment plan.

The services are simple to arrange: fast credit decisions, using web-based technology, can mean that your business won't be held up.

IBM Financing Advantage covers investments up to £300,000; Rapid Financing covers investments between £50,000 and £350,000. A range of Flexible Financing offerings can also cover long term business projects.

For more information, visit: [ibm.com/businesscenter/uk/thinktank](http://ibm.com/businesscenter/uk/thinktank)

Contact your IBM Client Manager James Kelly on 0147 5899049, or visit [ibm.com/businesscenter/uk/thinktank](http://ibm.com/businesscenter/uk/thinktank)

IBM, ibm express advantage and the IBM logo are trademarks or registered trademarks of IBM Corporation in the United States, other countries or both. Other company, product or service names may be trademarks or service marks of others. ©2008 IBM Corporation.