Scale Up Computing





Would you ever buy a **ten-storey office building** and **only use two floors?**

Your computing infrastructure should be a key business asset. **Did you know that it may only be working at 15 per cent of its true capacity?**¹ **And eating up more than 70 per cent of your IT budget** on operational support and maintenance?

Part of a series of papers on doing More with Less

and grow. **Re-thinking** the commercialisation of that infrastructure could **improve** efficiency and cut your total cost of computing by over 30 per cent.⁴

perating your existing IT infrastructure inefficiently could undermine your ability to differentiate, compete, win business

of your current computing capacity could be sitting idle

of data center managers claim their data centers

will max out their energy

capacity within one

to two years²

of digital data is now

unstructured³ and

requires greater effort

to turn it into usable

intelligence

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How long would you tolerate an **expensive**, **business-critical employee** who only spent 15 per cent of his or her time – your organisation's time – actually working productively? Chances are, that employee wouldn't last very long. Yet **your organisation could be effectively using just £15 out of every £100** you spend on your computing capacity.

It's like buying a fantastic new ten-storey office building but only partially using two floors. How can so much waste be tolerated? It doesn't happen overnight. As an organisation's needs evolve, IT systems are introduced to cope with anticipated requirements as well as actual use. In the drive for growth, a company's IT infrastructure can start to sprawl, and quickly become expensive and outdated. As a result, companies are often overspending on power, labour and maintenance for IT without realising the extent of the problem.

The complexity and cost associated with heritage computing technologies means that enabling change, flexibility and business growth can be restricted. Buying new technology is not always the answer. Adding equipment as you need it, also known as "scale out" computing, consumes more space and power, and



involves more maintenance and support costs.

Businesses need to improve and simplify their IT environments if they strive to optimise IT performance.

DO MORE WITH LESS

Research has shown that, in the long run, the market rewards those who make the most of the right computing resources in the right way.⁶

In other words, you're better off making the most of the appropriate IT systems, rather than just buying in more IT systems simply because they are new.

While many organisations in the UK are resigned to doing the same for less, at IBM we are committed to **doing more with less. Much more.** And we believe your organisation could do the same.

IBM uses integration, optimisation and innovation to unlock the IT efficiencies that can transform your business. Together, we can help you to make more of the computing capacity you are failing to use while making savings in the process. Instead of that mostly empty ten-storey building, you could have a two-storey space that allowed you to maintain and improve your current performance while eliminating waste and maximising utilisation.

Assessing your current IT infrastructure and understanding what you have already got will allow you to streamline your systems by cutting wasteful spending and investing in the right IT options only where needed. Alternatively, introducing utility computing could be a solution that would entitle you to pay for your usage only (i.e. don't buy ten floors, lease two).

USE AND IMPROVE WHAT YOU'VE GOT, GET RID OF WHAT YOU DON'T NEED

You need to understand your organisation's IT estate and find out more about the other floors in the building. IBM can help analyse current total cost of ownership for IT infrastructure in detail, taking into account all facilities, hardware, software and support staff costs. These infrastructure studies can help reduce IT systems and storage cost by over 30 per cent while improving your computing capacity and productivity, through:

 a reduction in servers via virtualisation – typically by over 50 per cent.⁸ You can ditch demanding data centres that have been draining your business of energy while gaining a single view of all computing; up to 70% savings⁷ could be achieved

through server

virtualisation

a significant reduction in operating system and software licensing costs – offering an estimated 30-70 per cent savings – without loss of productivity; and

 a significant reduction in power costs – up to 60 per cent of current IT power consumption costs in some cases.

Each of the assessments can provide specific and tailored recommendations for an organisation's IT infrastructure, revealing where you can do more with less.

This is a question of **efficiency and optimisation, with workloads optimisation the ultimate goal.** Different application workloads have different characteristics and requirements. By applying effective hardware and software solutions an organisation can increase performance and manage complexity while lowering costs. Improving the performance and effectiveness of IT systems results in a more powerful and power-efficient model, with more capacity for far less cost.

WHERE NEXT?

IBM continues to enhance its systems in both its servers and storage to deliver the stream of performance that took the industry from megahertz to gigahertz to multi-core. But this is only one part of the puzzle. IBM is redefining the industry's prevailing view of performance from the chip and virtualisation capabilities, all the way through the operating systems, middleware and deep optimisation of workload characteristics.

It is time to STOP the sprawl of commodity technology and the

up to 41% lower cost and 35% less

energy per transaction[°] achieved by optimising workload increasing waste of space, energy and financial resources. By working your organisation's computing capacity smarter and harder, the advantages will quickly stack up. Do you ignore the overwhelming evidence of waste in your largely idle system? Or do you **flex those** systems and force them to give you more for less money? The choice is yours.

SCALE UP COMPUTING

CONTACT US

To find out if an assessment is right for you, or to discuss how to do more with less, contact your IBM representative, or:

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