WELCOME TO THE HUB: THE ORIGINAL CLOUD IS DRIVING DIGITAL TRANSFORMATION

The mainframe isn't quite the center of the universe, but it's not far off

The mainframe sits at the heart of the data center: it's an essential hub, the focal point, with the other spokes of a business coming off it. It's the reliable data server, the system of record. It's the super-fast transaction server, the transactional beast of burden. It's the security server for many, thanks to its innate securability.

I'm far from being the first person to suggest that the mainframe was the original cloud. If you implemented and used a mainframe infrastructure in the effective ways, you were gaining all the benefits of cloud computing decades before the term came into common usage in the mid-nineties (cloud imagery had, of course, been used for many years to represent IT and other networks).

If you define the cloud as the on-demand availability of IT system resources, in particular data storage and computing (processing and transactional) power, without direct active management by the end user—then we're talking about the mainframe. What the cloud can do, the mainframe has been doing for a great deal longer, and doing it extremely well.

Scalability? No problem. While a major benefit of cloud is the ability to access resources as and when you need them, the sheer computing power of the mainframe means you can throw whatever you like at it. In the most recent BMC Mainframe Survey, more than half of respondents reported an increase in transaction volumes and 47% reported an increase in data volumes. 68% of respondents

expected MIPS, the mainframe's measure of computing performance, to grow. The platform can handle it.

Availability: again, mainframes match if not exceed cloud availability. Indeed, the reliability of the mainframe is a big selling point for the technology. Someone once wrote that you can measure mainframe uptime in *decades*. Today's mainframe is also as flexible and agile as cloud platforms, in terms of the choice and freedoms that it gives you in, for example, virtualization and resource allocation.

Going further than 'traditional' cloud benefits, the mainframe is also, potentially, the most secure platform around, it just takes a little time and application to ensure it attains and retains that security posture. By contrast, cloud can present a number of security issues and challenges, including visibility and control of your data. Cloud providers treat security issues and risks as a shared responsibility with their cloud customer. A well-managed secure mainframe takes away a great many of those risks.

As last year's BMC Mainframe Survey concluded, "The mainframe is front-and-center in today's digital business environment" and is "viewed as a valuable, growing, and evolving platform by IT professionals and executives… a critical component of the modern digital enterprise and an emerging hub of DevOps innovation. Workloads are growing, while large organizations continue to host much of their data on the mainframe."

"Executives and technical professionals have a high opinion of the mainframe, and they're putting it to work more and more to support digital business." So how can we help to make this happen?

Funnily enough, in an era of convergence and connectivity, cloud and mainframe are coming together: the mainframe in its role as the backbone of the data center, for data storage and processing, combined with cloud's ability to bring additional innovation (in analytics, say) along with accessibility and economies to the party. This could mean making mainframe data available via a (private) cloud to the applications and people who can utilize and exploit those resources in the most effective ways.

We already know the mainframe can be truly transformative; an agent for change, a hub for innovation. But this won't just happen, either, and we need to put the hours in.

In an *Information Age* article, Compuware's Stuart Ashby suggested how we might "ignite a mainframe transformation with three key mindset changes". Describing the mainframe as "the bedrock of IT innovation for over five decades, providing the reliability, scalability, performance, and security that organisations need", he says organizations can address the challenges of change in three ways. First, leaving traditional waterfall thinking at the door and instead approaching incremental change and improvements in more organic and flexible ways. Second, "reaching hearts and minds" through measurement, identifying value and benefits via a "before and after" approach. And third, redefining what it actually means to develop: working towards building a software delivery ecosystem that redefines *what it is* to be a developer. For example, increasing the use of automation, with all of the opportunities that brings.

We don't have to look far to see the value the mainframe already brings, and the impact it will continue to have. The platform is central to how many of the world's leading brands are conducting their business: retailing giant Walmart (the world's largest company by revenue), Nike (the world's largest supplier of athletic shoes and apparel), Bank of America (one of the biggest banks and largest companies in the US)—the list goes on. Take a look around the world's leading banks,

utilities, retailers, health service providers, even the military, and you'll find a mainframe in action. The transformation work continues.