Delivering Mainframe Services in the New Normal
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Introduction

As countries went into lockdown and social distancing and remote working became the norm, mainframe teams have seen significant and lasting changes in how they work.

At one time, the BMC Mainframe Services team spent most of the year globe-trotting, delivering services for clients in all sectors and across the full range of mainframe requirements. However, with security policies and rules rewritten overnight, off-site and remote working rapidly became standard practice. Quite apart from the social distancing requirements that came into force, most organizations’ offices closed. Some have remained effectively closed. Others are undergoing extensive redesigns.

It would seem for the foreseeable future, if you want something done, it will increasingly have to be done remotely. This is the new operating environment in which we have had to live, adapt and deliver.

This short paper is not intended to be an exhaustive guide to mainframe services and client requirements in the new normal. It provides a snapshot of how the industry and clients are adapting to change.

Remote Working

BMC Mainframe Services has always been geared up to deliver services remotely, when it made sense for a particular client, location or the services involved. This meant we were able to move immediately to a secure all-remote footing in the face of the pandemic and, importantly, do so across the entire spectrum of mainframe services, including security assessments, penetration testing and vulnerability scans. At the height of the 2020 lockdown, work undertaken and completed included, for example, planning and implementing an end-to-end Db2 system security project.

What does this approach to remote service delivery look like in practice?

Several options enable teams to access systems and work remotely. For example, a client can send a physical laptop that is pre-loaded with its own VPN solution. Alternatively, they can send a soft or hard RSA token, and we use our laptops to remote desktop or VPN into their systems. The main point is that we can work however our clients want, and they always have an assurance that we are working as securely as possible. During the pandemic we built a secure laptop to courier to a client, a major insurance company. They plugged this into their network and we immediately had secure access to carry out our tasks.

This is the new and, in many ways, better way of doing things: faster, more flexible, and ultimately lower cost. If onsite service delivery (when allowed) is required again or preferred, it could ultimately be priced as a premium service and would incur higher expenses. We cannot foretell the future. However, we do know that “COVID-19 secure” requirements are explicit. If there is no need to address a 48-point risk assessment, and to manage all of the logistics, practicalities and costs involved in having people travel and work onsite, then why would you choose to?
New Benefits Delivered

In our experience, the mainframe services clients who were new to remote working immediately recognized how agile this approach could be. Service teams can react more quickly, which is obviously important when it comes to security. No time is wasted making travel plans, with teams up and running within 24 or 48 hours. And that is true of all mainframe services, not only security.

In terms of headcount, if a client’s staff member was unable to work through quarantine or self-isolation, or became unwell, we could respond rapidly with standby and interim personnel. This means delivering someone who not only knows the technology inside out but is also readily available for Business as Usual or special project work within 24, 48 or 72 hours: again, whatever the client needs.

These working practices have meant even greater flexibility and responsiveness for cross-border organizations. Reduced travel requirements mean people can use more of their time more productively. Mainframe consultants, service and security engineers can schedule their working days to match the jobs at hand and different time zones. For example: we have a security consultant based in Australia that worked throughout 2020 supporting mainframe operations for a global bank’s business unit with facilities in Asia Pacific, South and Central America, and Europe. It was the ideal fit of the right expert with the client’s requirements.

At the same time, clients don’t need to cover the costs of travel and accommodation, and there are also environmental benefits. Remote working vastly reduces carbon footprints, starting with air travel.

Security Issues

Remote and home working have also brought additional security concerns: new ways of working generally mean new vulnerabilities. Lockdown was a boom time for the bad actors. For example, the first month of lockdown saw a 72% surge in financial losses from cybercrime. While the mainframe is the most securable platform on the planet, it does need thought, effort and application to actually secure it. It is clear that more needs to be done in securing both mainframe and enterprise systems. Indeed, a Forrester Consulting study published in July 2020 provided evidence of a “false sense of mainframe security” and that overconfidence and complacency were leaving many companies vulnerable. The study found that only two-fifths of organizations are taking the steps required to actively secure the mainframe. Yet issues including security detection and response, protecting data, and reducing endpoint security risks all increased in priority.

Forrester also reported that many organizations are now looking to managed services to help them to fill the gaps in their security stance: services that are increasingly easy to access and use in secure remote ways.


2 Source: A False Sense of Mainframe Security – a commissioned study conducted by Forrester Consulting on behalf of BMC Software, July 2020.
The People Dimension

This is another important strand: does the new normal also bring new opportunities to access and benefit from mainframe skills, and develop the next generation of mainframers? In addition to the pandemic’s impact on how services are delivered, from onsite to remote and home working, another effect is the opening up of a wider and deeper global talent pool.

BMC Mainframe Services has always operated on a global footing, utilizing diverse skills and expertise in EMEA, the Americas and Asia Pacific to address whatever issues a client is experiencing. However, with the best will in the world, and with mainframes continuing to experience a skills shortage, it can still be difficult to identify and secure the right skills at the right time.

The change in working practices provided another dimension to identifying and utilizing mainframe talent anywhere in the world: new opportunities to reach mainframers whose outlook was global but who wanted to stay local, tapping into an even more diverse resource pool to benefit client organizations. It also meant additional options to locate the key technical personnel that legislation insists must be recruited, trained and based in-country, for clients such as US government agencies.

Rising Demand For Mainframe Services

More opportunities to identify and deliver additional resources have coincided with increased client demand. As the latest BMC Annual Mainframe Survey made clear, the mainframe is now seen as an increasingly attractive hub for innovation.³ It is also proven to be reliable and resilient: consider the record volumes of online retail transactions and payments that took place during lockdown. PayPal, Amazon, eBay: all of those transactions traversed a mainframe at some point, and the platform coped fine.

IBM reported that 2020 had seen global C-level execs accelerating digital transformations, and made clear that people and talent are critical to the success of such projects.⁴ The demand for mainframers and mainframe services is continuing to rise, whether that means BAU or special projects; in job scheduling, workload automation, and any other area.

Towards the Autonomous Digital Enterprise

BMC’s Enterprise 2025 vision holds that every industry will experience seismic changes in the years ahead, as people, technologies, data, devices and ever-expanding networks converge to transform all areas of personal and professional life. The experiences of 2020, the re-emergence of the mainframe as an innovation hub, and the renewed focus on digital transformation underline the need for organizations to evolve rapidly and stay competitive in this disruptive world. The challenge—mainframe operations included—is to embrace intelligent, tech-enabled systems across every facet of a business to thrive during those seismic changes. This means creating a growth-enabled Autonomous Digital Enterprise.

³ Source: 2020 BMC Mainframe Survey – with more than 1,000 respondents, the industry’s largest survey of executive and technical professionals on their experiences with the mainframe.

⁴ Source: IBM Study - Majority of Global C-Suite Executives are Rapidly Accelerating Digital Transformation due to COVID-19 Pandemic, but People and Talent are Key to Future Progress, 30/09/20.
Time to Train?

The new normal has seen a shift in attitudes and approaches to remote teaching and learning, allied with the recognition that travel budgets can now be far better spent on investing in people. Institutions have become more inventive about how they engage with people and develop their skills. In this arena, BMC Mainframe Services has been running the Mainframer in Training (MIT) program for a number of years, with content and activity moving online in 2020, taking a steer from academia on how best to do this.

Younger people coming into the industry will now be fully acclimatized to this style of learning. A key benefit of the MIT program is having mentors sitting next to the trainees, guiding and coaching. This is happening remotely too, through screen sharing and desktop sharing. Such a stop-gap approach is perfectly acceptable until the industry moves to a fully stable blended model for training. And with off-site remote service and support now the norm, this approach to training will stand the new generation in good stead for their careers to come.

Conclusions: Towards the Future

In broader IT and business terms, the tectonic plates are continuing to shift. Our industry is changing and we must be ready to meet the demands that will follow. We have to secure the people and talent necessary to deliver the operational scalability, flexibility and security that organizations will depend upon. As a provider, our people and skills base have to be more flexible and responsive than ever, ready to pivot to deliver whatever is needed.

With Forrester reporting that many organizations are looking at managed services to help them fill the gaps in their in-house capability and provision, could your own organization leverage remote managed services: to complete delayed or stalled projects, to augment in-house resources and move closer towards the Autonomous Digital Enterprise while helping to create the next generation of mainframers?

The skills shortage has not disappeared, even if we can cast our net wider in identifying the people we need. The bigger picture is about the next generation: there has never been a better time for organizations to plan training in more detail, and to properly come to terms with succession planning for their mainframe and other technical teams.
We work in technology but our industry is ultimately about people and trust. Clients trust providers such as BMC Mainframe Services to provide the experienced people and expertise they need, when they need them. They were familiar with seeing us onsite, doing pen tests and the rest in person—and they now trust us to deliver the same high quality results remotely. Our trainees also trust us, to give them the best learning experience, imparting the knowledge and skills they need for their current and future employers.

2020 and what comes next should be seen as an opportunity: to explore smarter ways to fill gaps in in-house capability and service delivery, and to give the next generation of mainframers the time, space and encouragement they need to grow. Our industry can only benefit.