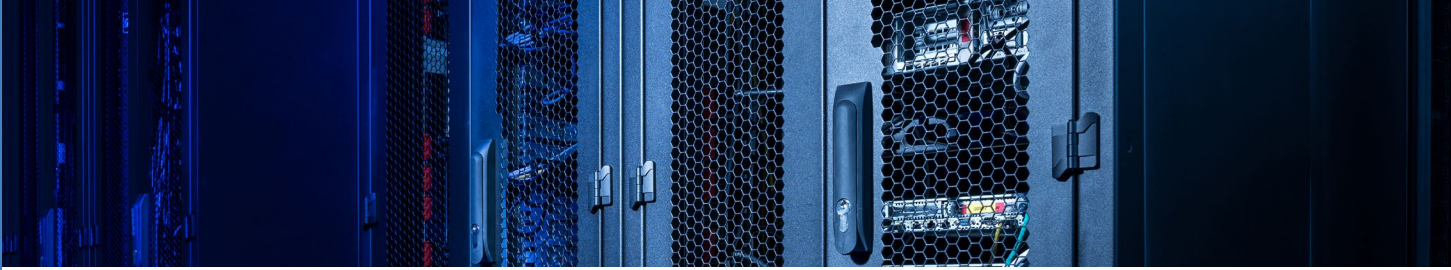


5 Key Benefits of Managed Mainframe



Introduction

If you don't think first of mainframes when someone asks you for a list of key modern technologies, you are not alone. Some are surprised that mainframes even continue to exist at all. But they do, and for a good reason: no other machine matches the mainframe's sheer processing power and efficiency or ability to process massive amounts of data.

That distinction is particularly important today. The rise of sophisticated analytics and the unprecedented volumes of data available to analyze make mainframe capabilities more valuable than ever. How much data are we talking about? Today, the human race generates more data every 14 minutes than is contained in the entire Library of Congress.¹

■ Mainframe Management Challenges

As relevant as mainframes are today, though, managing and maintaining mainframes is becoming more challenging. Many mainframes continue operating long passed their proposed ends of life. Moreover, there are fewer and fewer IT professionals with the specialized skills required to support mainframes.

With all of that in mind, it is easy to understand the increasing popularity of managed mainframes solutions. Managed mainframe allows businesses to get the benefits mainframes deliver without the hands-on maintenance headaches. This eBook will look at 5 key benefits of managed mainframe solutions.

¹ NetworkWorld. <http://www.networkworld.com/article/3123460/hardware/mainframes-2026-what-the-future-holds-for-big-iron.html>



Current Technology Benefits

Mainframe technology is well-established and highly stable but, nevertheless, continues to evolve. Like non-mainframe computers, mainframe software and hardware, too, undergo updates. As a result, hardware may require replacement, and software may require patching.

Such maintenance activities can be costly and time-consuming. With a managed mainframe solution, however, you do not incur those costs. Your managed mainframe provider can provide access to the latest and fastest mainframe processors, enterprise disks, and virtual tape systems.

■ Management Flexibility

Choosing a managed mainframe solution does not automatically require that you use a provider's hardware and software. For example, you can choose to continue using your mainframe solution – the hardware and software you currently use – but let the provider manage your mainframe personnel.

You can also choose to utilize a service provider's mainframe hardware and software but provide some of the maintenance using your own resources. In such a scenario, for example, you might assume responsibility for software maintenance and patches. Each business's needs and preferences are unique, and you can establish a service with your managed mainframe provider that fits your specific requirements.

Data Security Benefits

Mainframe users may have exceptionally large volumes of data to protect. Keeping data secure in a mainframe environment could require a variety of safeguards, including data encryption and other security solutions for the network, server, and operating environment layers. All of these tasks require specialized skills. Even fundamental activities such as backup require a different skillset for mainframes.

Here again, managed mainframe solutions offer important benefits. For example, managed mainframe providers typically offer holistic mainframe backup solutions with bonus offerings, like a disaster recovery and data replication service bundle that features include off-site backup.

■ Controlling Your Workloads

Ensuring your data's security and integrity is an important aspect of maintaining control over your workload. Working with a managed mainframe provider can offer you as much workload control as your organization needs.

If your business has only intermittent need for mainframe capabilities, a multitenant mainframe solution might be the right fit. Alternatively, if your business has a consistent requirement for mainframe capabilities, you may choose to have dedicated mainframe hardware and software housed in a provider's data center. With these and related options, you can determine the degree of workload control that aligns to your specific security and production needs.



Migration Benefits

One of the primary concerns that IT professionals have when considering managed mainframe solutions is the process of migration. Moving existing workloads and data can be time-consuming and potentially disruptive. Few businesses can afford to interrupt business as usual even briefly.

When working with a managed mainframe provider, you should find that migration does not pose an obstacle. Your provider can manage all the details of relocating your workload from your data center into the managed mainframe environment. In many cases, the provider may even be able to move your workload as-is, creating no interruption to productivity whatsoever.

■ Consistent Operating Environment

Businesses operating mainframes have invested in specialized systems, processes, and employee skillsets. Even when moving to a managed mainframe solution, you can continue to leverage that investment. The expertise you have established in-house can continue to benefit your business over the long-term.

This is because your managed mainframe service provider can work with you to create a customized project plan that will preserve your mainframe operating environment when migrating your existing workload. You may also use the opportunity to update the environment as part of the migration. For example, your provider can coordinate with your internal resources to modernize out-of-date software versions that no longer receive vendor support or that require costly, third-party support.



Flexibility Benefits

Mainframe systems have multiple components. Even if you move to a managed mainframe solution, you retain the privilege of determining which of those components to migrate and continue using. Your managed mainframe provider can offer a range of incremental migration options.

For example, you can choose to colocate your mainframe processor at the provider's datacenter but use the provider's storage for your data. Alternatively, you could migrate your entire current system and use the provider's tape subsystems to backup and restore, establishing a robust disaster recovery solution. Leveraging the provider for disaster recovery can provide greatly improved Recovery Point Objective (RPO) and Recovery Time Objectives (RTO) options.

■ CPU Options

For some mission-critical mainframe workloads, businesses require the predictability of a dedicated CPU. Moving to a managed mainframe solution does not require foregoing the use of a dedicated CPU. Providers can offer options that include a dedicated CPU in either a dedicated or shared multi-tenant mainframe environment.



Financial Benefits

The costs associated with mainframes can be high. For example, the costs of physically maintaining a mainframe are typically higher than those for non-mainframe systems because mainframes consume more power and cooling resources.

In a managed mainframe solution, your provider can achieve economies of scale by supporting multiple mainframe environments. Similarly, the provider can amortize the costs of setup and operations across multiple environments. The provider can then pass those savings on to you.

■ Capital Outlay

Along with the costs associated with physical maintenance, hardware and software costs for a mainframe are high as well. Unlike x86-based systems, mainframes do not typically offer the option of using commodity components. By choosing a managed mainframe solution, you gain the predictability of subscription-based pricing that allows you to avoid significant capital expenses such as:

- Specialized real estate
- Mainframe hardware
- Dedicated heating and cooling equipment
- Software licensing
- Software maintenance



Conclusion

Choosing a managed mainframe provider makes it easier for you to access the most current mainframe technology. Your provider can give you access to the latest and fastest mainframe processors, enterprise disk, and virtual tape systems. You can also choose to continue using your current software solution but let the provider maintain software duties such as security patches and updates.

Managed mainframe solutions offer significant data security benefits. Providers typically offer disaster recovery and data replication service bundles that include off-site backup. This allows you to maintain production control of your workloads.

The migration benefits of managed mainframe solutions include the option of having your provider manage all the details of relocating your workload as-is, providing a seamless transition so that you continue running your production workloads in the managed environment just as you do today in your own data center.

Managed mainframe solutions are flexible, with providers offering incremental options such as colocating your mainframe processor and maintaining a dedicated CPU. And the financial benefits include the opportunity to achieve significant physical site savings and gain the predictability of subscription-based pricing.

Interested in managed mainframe solutions? **Connect with the mainframe experts at PSR to discover the ideal managed solution for your business.**

