

Why 'legacy' mainframe tech is not outdated nor irrelevant

By [Andre Van Wyk](#)

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A perception has developed that so-called 'legacy' technology is outdated and therefore irrelevant as we accelerate toward digital transformation. One such example is mainframe technology. Interestingly though, not only do many large enterprises actively rely on their mainframe technology simply to function, but they are also using it to run open systems and cloud services.

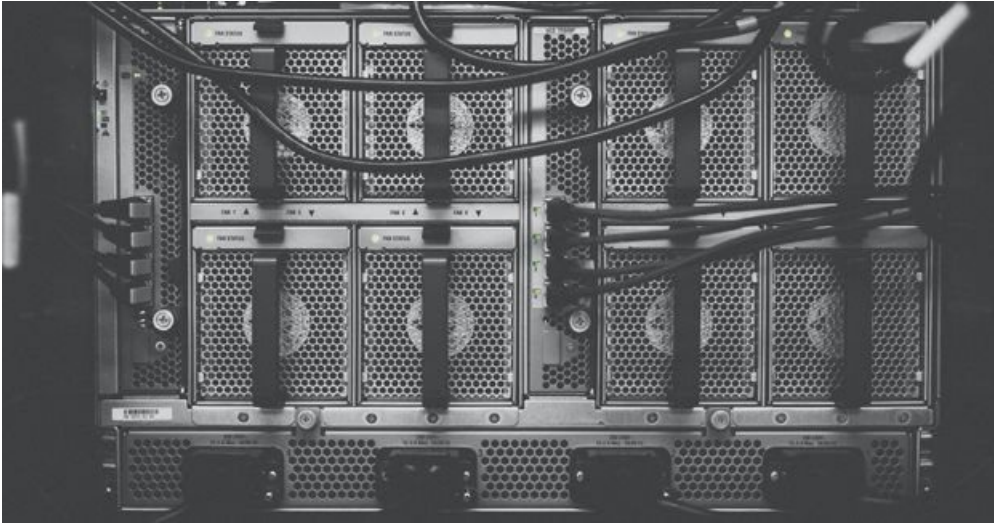


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Bringing this technology into the 21st century requires a change in mindset and the right technology partner, rendering the mainframe far from the end of its life.

Bulletproof technology

While startups can jump straight into the cloud, for the majority of existing large enterprises, the mainframe is still critical to operations. The big four banks in South Africa are the largest users of the technology in the country, with many proprietary systems and code living on the mainframe, and all ATM transactions running through it. The retail industry, specifically at point-of-sale, also relies heavily on mainframe solutions.

While there may be a misconception in the market that this technology is no longer relevant, the fact is that it is heavily invested in, and a tried, trusted and practically bulletproof solution. Age is actually a benefit in this regard since the systems are optimised and run without error. They are effective workhorses and replacing them with open systems or cloud solutions is costly at best and in many instances, just not possible.

The mainframe is also a highly secure platform, which can be run in totally isolated partitions with multiple instances that have no effect on others. The security environment is robust, and it is possible to obtain military-grade encryption.

Disaster Recovery (DR) is another strong point, as it is not necessary to maintain duplicate licenses for production and DR environments. With a single license on a mainframe, a fully functional DR site can be maintained and moved to production at the touch of a button. This adds further cost-effectiveness to an already cost-effective solution.

On the downside

While there are several benefits to continuing to run a mainframe environment, including the fact that the hardware costs themselves are negligible, there are also a number of issues to consider.

The biggest challenge is the licensing of software, which is the highest cost involved. There is also the issue of the skills required to continue to support it. They are scarce resources and are therefore costly to maintain. The software and the skills represent the two largest cost centres around mainframe systems.

Bringing the cloud to the mainframe

Yet as we move forward into a digital era, cloud infrastructure is eating into the mainframe space, and vendors need to adapt by making a move into the cloud space themselves. While the mainframe is considered legacy technology, it is actually possible to run as a cloud-based service. This delivers the benefits of both technologies while supporting the journey toward digital transformation.

Using the secure infrastructure of the mainframe and extending it to the cloud means that cloud-based applications can run on this workhorse platform, which offers the benefits of a secure environment and high levels of integrity. In addition, the nature of the mainframe lends itself toward these applications well.



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As a single platform that can be divided into many pieces securely, the network infrastructure can be simplified, since it is not necessary to have multiple servers communicating over an open network. It is also simple to maintain since any updates need only be applied once and will proliferate to all of the various pieces.

A place for dinosaurs

Moving off the mainframe is costly, complex and often simply not a feasible solution. However, it is not always necessary. It is possible to modernise technology and move forward with digital transformation while leveraging the investment in the mainframe.

Using the mainframe back-end and performing a screen scrape to 'skin' the system with a modern look and feel can go a long way towards continuing acceptance of mainframe solutions.

In addition, using the mainframe as a backbone and data repository, while offloading data to servers for manipulation using open systems, is an effective way of merging new and old worlds. The mainframe becomes just another source of data, and the look and feel as well as functionality can be improved with modern features.

There is a place for dinosaurs in the modern world. The mainframe is still a cost-effective, robust and secure solution that has a role to play, and the right IT partner can help enterprises to leverage their investment and help to bridge this

technology. Legacy technology is not necessarily irrelevant, it just needs a new approach in a digital world.

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