# The case for the

Prudential is actively migrating to the Cloud, but why? Here we unpack the technology behind Cloud computing, and how it supports our promise to clients



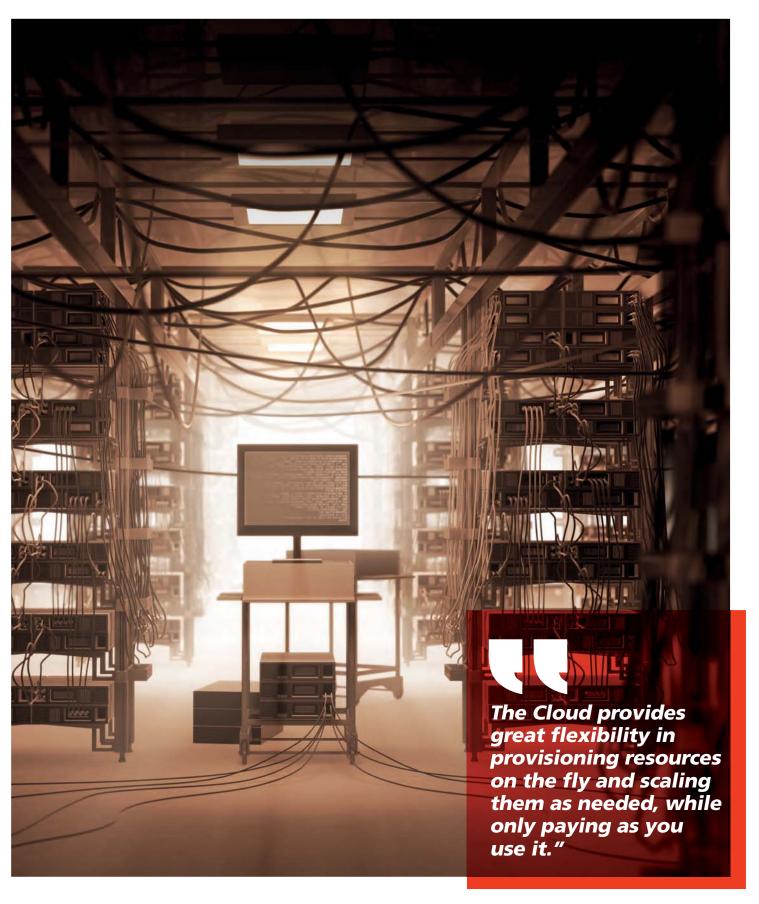


Meagen Burnett, COO. and Steven Hardisty, IT Manager, Prudential Investment Managers

o quote Microsoft: "The Cloud is a metaphor for a global network of remote servers that operates as a single ecosystem, commonly associated with the Internet." This ecosystem has some great benefits, such as freeing up a company's capital expenditure on large hardware outlays and moving to an operational subscription model, providing a point-in-time view of your expenditure. The Cloud provides great flexibility in provisioning resources on the fly and scaling them as needed, while only paying as you use it. Any company can now have a global presence collaborating anywhere in the world while always being up-to-date.

What does this look like in layman's terms? Simply put, the Cloud is nothing like the clouds we learned about in school. The "IT Cloud" is a combination of very large physical data centres built on the ground, normally in multiple international locations. It is a giant facility provided by global technology giants like Microsoft, AWS and Huawei that holds the physical computing power, networks and storage that would historically have sat in a building of each company using it. With the evolution of the internet and the increase in data transmission, it is simply a more efficient way to share technology resources.





#### **SLOW START FOR SA**

While this all sounds interesting, it is not new. The Cloud has been around for 10 years, but, as with most things technological, it has taken a long time for it to mature to a point where it is stable, reliable and integrated to a level that businesses need. South Africa has struggled for the past decade with the quality of Internet connectivity to the rest of the world. Low bandwidth at high prices has been prohibitive.

Recent dissemination of fibre services in South Africa, however, has increased competition among internet service providers. This change has made data and storage more cost-effective and allowed for fast, scalable data transmission that supports businesses. So it has now reached a tipping point for South African companies to consider migration to

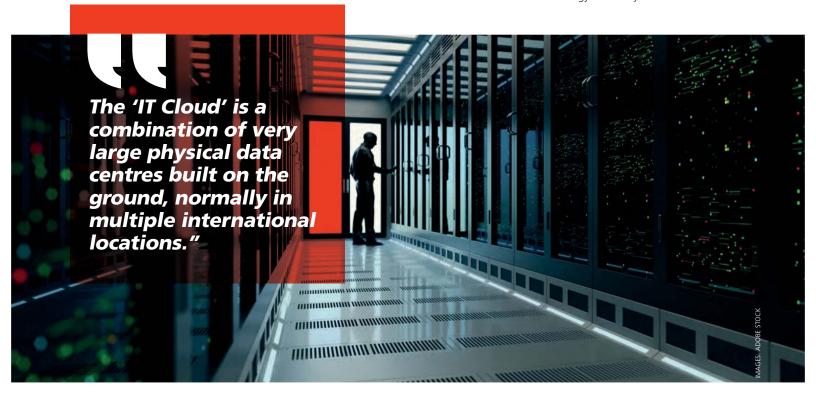
the Cloud, to take advantage of the global Cloud services market. These improvements and increasing business appetite have also encouraged the large Cloud players to build Cloud infrastructure in South Africa. This gives companies local Cloud presence for the more sensitive data they might previously not have wanted to store outside of South Africa's borders and/or to ensure even faster access to business-critical applications or services. Whether this be for business preference or regulatory reasons, companies now have options for their IT infrastructure. The hosting of infrastructure in the Cloud's data centres is known as "Infrastructure as a Service" (IAAS).

## **CONSOLIDATING SERVICES IN THE CLOUD**

IT application providers have also seen the benefit of the Cloud. Why build

applications to support multiple on-site installations, manage version issues and deal with individual client upgrade constraints? Some of the big application providers in the Investment Management and Services industry have seen the opportunity to consolidate their offerings in the Cloud. This way they can provide one version for all customers and upgrade everyone at the same time. They can also further augment their service offerings by providing managed data services to support their application. This service is often referred to as "Software as a Service" (SAAS).

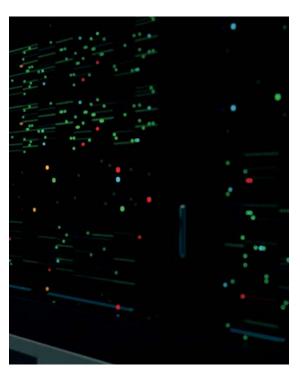
This makes sense, but challenges the operating models and infrastructure roadmaps of these businesses. So, with limited software options, some businesses are being dragged to the Cloud without necessarily having decided that it is in their strategy. But everyone that uses an



electronic device is touching the Cloud at some point, so why would you not move your business to the Cloud? It is a natural technological progression.

The question then arises: what about losing control over your data? What about security? More businesses than ever before are adjusting their security strategies to focus on securing data applications and to find ways to innovate faster within the multi-cloud environment. Now is the time to mitigate the myths and do away with the misconceptions.

With the General Data Protection Regulation (GDPR) legislation passed in Europe, and the Protection of Private Information (POPI) bill pending in South Africa, business and regulators are more aware than ever about security risks associated with holding personal or financial data. It will be imperative



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for access systems across varying architectures to apply consistently strong security policies and data transport services that can monitor and highlight situations where unauthorised access may be attempted.

Organisations must ensure they invest effectively to protect against an everevolving and expanding threat landscape, and the GDPR will undoubtedly help businesses view IT cloud services as more reliable. By embracing modern application architectures and sustainable multi-cloud models, organisations will capitalise on the digital economy and drive greater profitability. Those application vendors already in SAAS environments are using the fact that they are already GDPRcompliant as a selling point for their applications.

### WHAT IS PRUDENTIAL DOING?

Prudential has embraced this move to the Cloud as one of our strategic IT imperatives. Our approach has been to understand, trial and then implement it across different layers/types of Cloud technology.

We started by adopting a "Cloud first" principle. This means that for any new application request, we will first examine using Cloud technology, and then only if this isn't suitable will we finally consider bringing it in-house. Through this, for example, we have been able to quickly meet our business' analytical demands

by hosting new quantitative analysis applications in the Cloud.

Thereafter, we started migrating our "off the shelf" applications such as Microsoft Office to Office 365, giving Prudential the collaboration benefits of improving our overall communication and productivity. Concurrently, we started moving our infrastructure over to the IAAS. This is being done on a risk-based approach where we first put our test environments and our Disaster Recovery environments into the Cloud.

The intention is to have our full production environment in the Cloud by the end of 2020. Our application migration process is largely being driven our suppliers' strategy. SAAS and managed services seems to be the topic of the moment, and we will, without a doubt, see many of our core applications hosted in our suppliers' private clouds within the next few years.

So, in conclusion, Prudential is approaching the Cloud in the way we do most things: with a keen sense of curiosity about the opportunities and a determined focus on ensuring we manage the risks for our clients. Our belief is that through this migration we will achieve better security for our client data, better efficiency for our operations and scalability for the continued growth of our business.