

Journey to the colo-enabled cloud: the quest for profitability

The rapid development of IT and increasing investment in cloud services has led to flexible, customised IT strategies and deployments becoming the preferred approach for organisations today. This has led to IT service providers and end-users taking advantage of a vast array of both new and tried-and-tested offerings, and adopting a hybrid cloud solution for their ever-changing IT environment.

The on-demand elasticity and pay-for-consumption model of many cloud services is particularly attractive for meeting unpredictable workloads, and allows businesses to flex up and down without the capital expense and planning involved in equipment and application refreshes.

This opportunity scenario is neatly summarised by research and consulting firm Deloitte in their report Smarter Data Centre Outsourcing – Considerations for CFOs. “Organisations now face combined challenges of dealing with fluctuating demand combined with an expectation that the organisation’s IT department can provide these services in a rapid and cost-effective manner.”

Today the challenge for IT decision makers is to develop a solution that involves an optimal mix of in-house, colocated and cloud infrastructure. As the Deloitte report states,

“An informed investment in the right combination of internally and externally provided data centre services can deliver excellent value for money while providing the necessary service, flexibility and security to meet your business needs.”

The promise of the new cloud economy is that companies will continue to develop better purchasing strategies to minimise waste and realise greater value in their IT investments they never knew existed.



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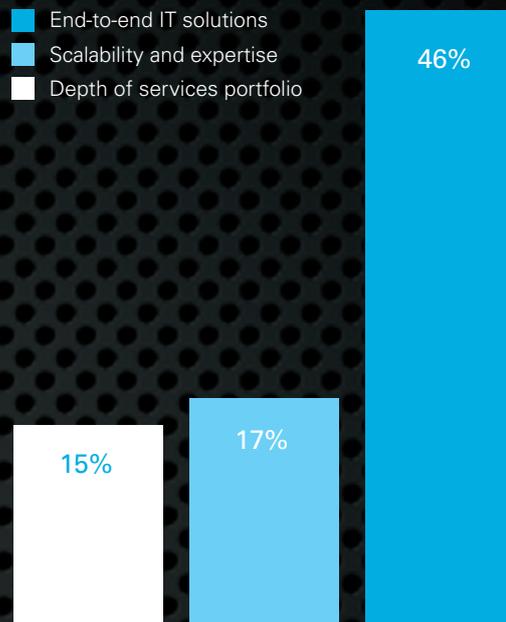
Growing demands on service providers

While businesses are on this journey the global IT landscape is not going to stand still. CenturyLink's 2014 Global IT Trends report, which surveyed 550 IT leaders, estimates that within one year, in-house private clouds would become the most popular IT infrastructure model. In two years, collocated services are predicted to be preferred, and in five years outsourced cloud will become the leading IT strategy.

The move towards cloud-based solutions may be great news for cloud providers of all stripes, driving greater opportunities around hardware migrations and the transition to a software-based cloud platform. However, it's unlikely a single cloud offering will service all of a customer's needs. A typical enterprise business will be using multiple cloud offerings plus their own proprietary technologies, so successful managed service providers need know how to integrate and orchestrate these various offerings to deliver the best customer outcomes.

Cloud service provider Global Storage's CEO David Duncan describes the process: "Our client relationship often starts by delivering cloud services to solve existing pain points like backup, disaster recovery and other IT services that the client feels comfortable moving to the cloud. The positive experience a client gains through this engagement allows them to confidently expand their usage of cloud services to include virtual private data centre and cloud IaaS for production workloads. In moving production workloads to the cloud, businesses rely heavily on the skills and the full range of high-end services we offer. As a broker of these IT services to their business we become central to their IT planning and someone they work with on a daily basis."

IT leaders' top priorities for selecting outsourcing suppliers:



Source: CenturyLink's 2014 Global IT Trends survey of 550 IT leaders

Gartner research director, Michael Warrilow, said he has seen growing interest in cloud managed services. "It's a stepping stone. It is less likely an outsourced customer will jump ship to a public cloud provider. They are more likely to look at a managed cloud from their incumbent or another provider." Warrilow said the challenge for the channel is to help articulate what aspects of agility makes sense for the client and help them measure it.

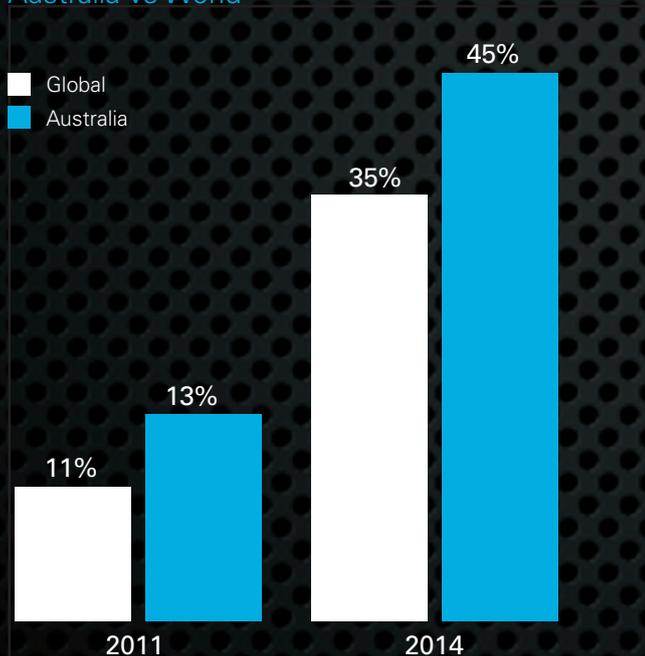
Gartner's report from February 2014, Market Trends: Colocation and Hosting Market, Asia/Pacific 2014, states:

"The good news is that demand for managed hosting is growing strongly from a low base, but it will evolve significantly to cloud-enabled managed hosting. The service is delivered on a cloud platform, which includes compute and storage, as well as associated managed services, which will be increasingly delivered in a standardised and automated way."

View from the cloud

Australia and New Zealand are uniquely poised to leverage cloud technology. This is due in part to these nations' tendency toward early adoption, but also to the developing local data centre presence of major players such as Microsoft and Amazon. As with other market sectors, competition will lower costs for customers and encourage IT outsourcing providers to expand offerings to suit their customers' growing and evolving needs.

Cloud infrastructure growth 2011-14:
Australia vs World



Average over three years:

106% Global
150% Australia

Source: DatacenterDynamics 2014 Global Datacentre Census

To succeed in an increasingly competitive and demanding marketplace IT providers will need to offer much more than access to infrastructure and management expertise. They will need to be able to analyse an organisation's IT needs across several factors including risk and security, operating expense versus capital expense, and scalability and agility to determine the best combination for their hybrid cloud.

Andrew Thomas, CEO of IT infrastructure consultancy Thomas Duryea says,

"Our cloud platform for Australian businesses has been built in the context of what our customers need. This new platform is designed to 'shift the needle', so to speak, so that IT spends less time on running and managing internal systems, and more on becoming a centre of innovation and a premium service provider."

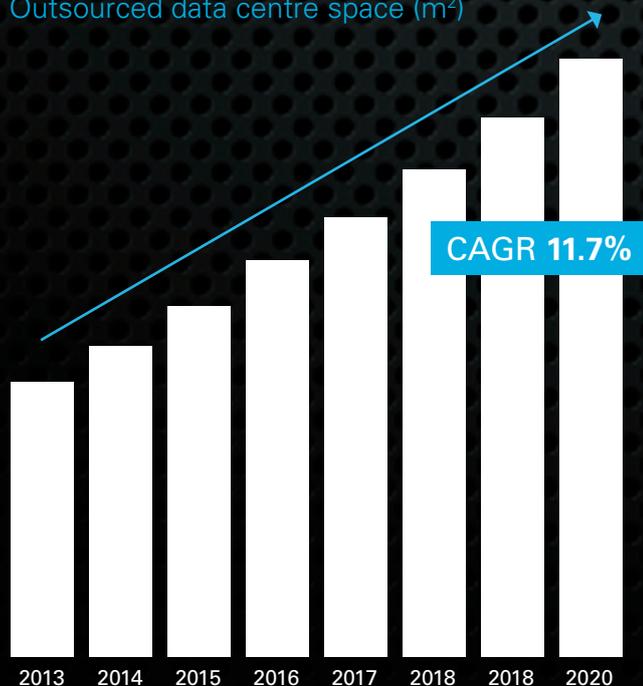
In this diverse and fast-moving business environment one factor at least will remain unchanged; however virtualised an organisation's IT becomes, their data storage, compute and disaster recovery will need a secure, reliable physical location to call home: the data centre.

The new paradigm of the colo-enabled cloud

The crucial importance of data to all organisations means data centres are at the core of the IT world. The internet, private networks and the cloud use them for storage and connectivity, and businesses increasingly rely on cloud computing and virtualised IT environments, hosted in any number of data centre locations, for their day-to-day operations. Furthermore, mobile devices, social networks, big data and the Internet of Things are creating unprecedented growth in global data volumes.

The Frost & Sullivan report Australian Data Centre Services Market 2014 states that "A growing trend is for telcos and managed IT service providers to acquire data centre space in carrier neutral providers to supplement their existing data centres. The main carrier neutral data centre service providers ... will be key drivers of growth." The report also estimates that over 75 percent of Australian organisations with a data centre service are utilising outsourced providers to some extent.

Outsourced data centre space (m²)



Source: Frost & Sullivan Australian Data Centre Services 2014

Data sovereignty is an important consideration in this highly globalised world. The reality is many Australian businesses, large or small, want to understand where their business data resides. Many businesses are comforted by the knowledge that when it's stored locally, it is protected by Australian laws and not subject to foreign jurisdictions.

"Manage Protect's end customers tend to be small-to-medium sized businesses," said Andrew Johnson, Director of the specialist SaaS security provider, "and they want to work with people they trust, and see their data kept within easy reach. Even when utilising a global technology platform like Soonr, our customers sign their agreements with their IT providers and us, as we are delivering the service on our infrastructure, which is powered by best-of-breed third parties ... so everything about our services stays onshore."

This concern about the location of a company's data is equally important to overseas-based providers operating in Australia. Jeff Hurmuses, VP of Asia Pacific for Barracuda Networks, a US-based IT security provider, comments:

"Being able to offer our local Australian customers security, performance and a nationally consistent experience is increasingly important as those customers continue to migrate to the cloud and want their critical backup data hosted primarily in-country."

So there are many reasons why large scale, highly connected colocation data centres are under increasing pressure to keep up with market demands. Their pivotal role in an organisation's profitability, risk management and competitive success means that data centres and their business ecosystems are expected to enable greater innovation and business transformation than ever before.

Those facing these challenges need to develop ways to improve application and workload management by combining internal, cloud and colocation services into a unified whole. On this journey they will be supported by colocation services that have evolved to meet these needs by supporting high-density computing, remote management, customisation and importantly, access to the data centre's community of carriers and service providers.

The future is hybridised

Colocation has traditionally been viewed as a commoditised and standardised service, but today's business landscape requires a data centre that provides more than the essentials of secure space, power and cooling.

Data centres increasingly need to support flexible deployments and system integration so their customers can run short-term workloads, build their public and private clouds and migrate applications between them.

Because this happens in an environment where different aspects of a company's IT operations develop at different speeds in a fluctuating blend of technical, commercial, and operational models, a mixture of colocation and cloud in the one facility has become both a common strategy and a key enabler for further cloud utilisation.

Cloud service provider Global Storage's CEO David Duncan says,

"We're seeing a big shift in thinking within our customer base and the general IT community, particularly with how technology is physically being consumed. There is a big shift towards virtual private cloud and hybrid cloud deployments and this means businesses are going to need to acquire new skills and look for partnerships that can assist them with this move. We often say that cloud services are 30 percent infrastructure and 70 percent process and resource. It's the process and resourcing businesses need help with."

Today, this kind of hybrid cloud strategy has become the standard, providing many organisations with an optimum combination of flexibility and security, and creating the new IT paradigm of cloud supported by colocation.

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'One third of high performers have already replaced their legacy infrastructure with both private and public cloud components. The fear of losing critical data should not paralyse organisations making the jump to hybrid cloud environments. CIOs are also blinded by conflicting information about cloud in what has become an extremely congested market. What they really want to know is how they can decide what data to put where'

Matthew Coates, managing director of Accenture Cloud.

Source: *The Information Age - How to build the best hybrid cloud for your business* by Ben Rossi 23/06/14

Key drivers of data centre growth and investment in Australia by % of surveyed Australian organisations

73%



Network connectivity options

61%



Access to cloud, MSPs or other partners

59%



Cost of energy

51%



Big data

39%



Virtualisation

37%



Business continuity

Source: Digital Realty's 2014 survey of data centre trends in APAC by Forrester Research

Next-generation data centres

With flexible-use space, access to significant future power, high-levels of physical security and a diverse ecosystem of cloud service providers and carriers, the best modern colocation facilities have become a one-stop-shop for IT services.

These data centre operators are offering services that can be quickly provisioned in a similar way to the cloud, such as quarter and half racks, online ordering and short-term contracts. Services like these have really opened up the benefits of colocation to a broader range of organisations, and combined with onsite smart hands and project management, means that they don't even need to set foot in their data centre.

Additionally, many colocation facilities provide marketing support for their customers, to complement access to the data centre's ecosystem community of carriers and services providers – a marketplace itself of potential customers and business partners.

Optimise latency with colocated clouds

As customers migrate part of their workloads to the cloud, it makes more sense for them to close down their own server rooms or small data centres and colocate their proprietary equipment alongside many of the clouds and carriers they are connecting to.

If both environments are hosted in the same data centre, the latency will be so low that a company can run computing seamlessly between its private and public infrastructures. Harmonising private and public cloud deployments allows companies to reap the full benefits of adding a public cloud while avoiding the negative impact of multiple environments and connectivity costs.

Businesses often invest in more private infrastructure capacity than they actually need on a day-to-day basis because they have to service peak capacity requirements, not average capacity requirements. With a hybrid cloud they can keep those core capacity needs in-house and shift workloads to their public cloud as required.

Flexible, connected, intelligent

When a data centre ecosystem is combined with the flexible interconnect and carrier infrastructure available from next-generation colocation providers, they allow a company's IT assets to be unified in a single integrated network to better align with the way they consume cloud services and provide the ideal environment for a customised IT service.

Another major benefit offered by the leading colocation providers are online management portals that deliver on-demand infrastructure analytics and a pipeline for 24/7 customer service. These remote management tools are part of the data centre's evolution into the software-defined data centre (SDDC), which meets the demand for connectivity and flexibility with standardised hardware and virtualisation to lower costs and decrease complexity.

Related to this, software-defined networking (SDN) is simplifying and reducing the cost of data relocation. This makes it easier for customers to float workloads into their public or private clouds, or their own colocation infrastructure – either way it's all going to a data centre.

The result is an environment where compute, storage, networking, security and services are all virtualised and managed by software, and which integrates DCIM functions to give organisations the ability to manage their infrastructure with game-changing efficiency and speed.

Many colocation data centres have now evolved from being another relatively undifferentiated service provider into a business partner with a unique contribution to business profitability. By assisting organisations on a journey to colo-enabled cloud and a more efficient, manageable IT environment under a single service umbrella, the next-generation data centre has a central role to play in helping them realise the true value of their IT service.

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