

Strategically Source Your Next Data Centre

Data Centre Purchasing Drivers,
Priorities, and Barriers for Asia-Pacific
Firms

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Executive Summary

Enterprises are experiencing rapid growth in the data they can access and store, which is having a profound impact on how they invest in data centres. Forrester estimates that data is growing at a rate of 20–25 per cent each year, and that in Asia-Pacific, companies are choosing to optimise and consolidate their technology systems in an effort to support new business initiatives based on this information.¹ To accomplish this, firms are looking for new facilities that can support greater volumes of data and high-speed connections between data centres.

In January 2014, Digital Realty commissioned Forrester Consulting to survey enterprises in the Asia-Pacific region about the drivers, priorities, and barriers behind their data centre investment. The study surveyed 267 IT decision-makers from multinational corporations (MNCs) with presence in the Asia-Pacific region.

Forrester's study yielded three key findings:

› **Optimisation and consolidation are key drivers for acquiring new data centre capacity.** Forty-seven per cent of respondents cited virtualisation as the biggest

driver for seeking more data centre capacity, as it requires significantly higher power densities and low-latency, high-capacity network infrastructure (see Figure 3). Big data was the second most popular reason for expanding data centre capacity, followed by consolidation and business growth.

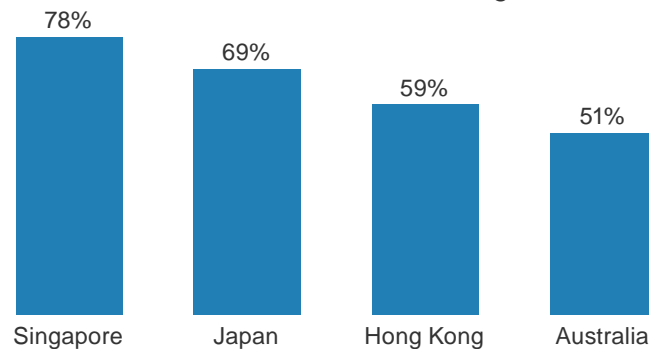
› **Customers prioritise the data centre's risk profile, resilience, and level of control when evaluating future capacity.** In the Asia-Pacific region, firms rated the risk profile of the data centre location, followed by the data centre's resilience and availability, as the most important factors when making decisions about acquiring new data centre capacity. However, in the mature Australian market, firms cited network connectivity as the main priority guiding their decision.

› **Singapore and Japan will lead data centre outsourcing in the Asia-Pacific region.** Firms in the Asia-Pacific region increasingly want to outsource or collocate their data centres. In Singapore, 78 per cent of respondents have plans to outsource their data centres, compared with 51 per cent in Australia, where customers have already made significant investments in building their own data centres (see Figure 1).

FIGURE 1

In The Asia-Pacific Region, Most Firms Plan To Outsource Their Data Centre In The Future

“How do you plan to source your new IT capacity in the future?”
(Percentage of respondents who plan to outsource their data centre in the future by collocating, fully outsourcing, or using infrastructure-as-a-service or managed services)



Base: 267 senior-level Asia-Pacific decision-makers with responsibility for decisions involving data centres

Source: A commissioned study conducted by Forrester Consulting on behalf of Digital Realty, February 2014

Firms Will Optimise And Consolidate Their Data Centres And Rely On Multiple Facilities

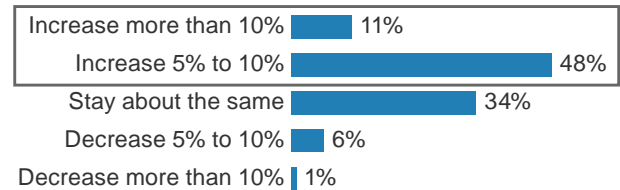
Companies increasingly use digital platforms to win, serve, and retain customers. Customers, employees, business units, and partners already expect their IT environments to be seamlessly available 24 hours a day, seven days a week. More importantly, these stakeholders expect applications to perform consistently within a secured computing environment, regardless of their geographical location when accessing the service. Our study found that:

- › **Demand continues to grow.** Fifty-nine per cent of firms expect their data centre spending to grow in the next 12 months, and this trend will continue in 2015 (see Figure 2). Companies expect their data centre spending to stabilise in 2016–17 as they fully outsource their data centre services and use hybrid environments to support demands associated with business growth. Growth will be the fastest in Australia and Singapore.
- › **Firms are optimising and consolidating their technology infrastructure to support new technology initiatives.** Business growth, big data, the Internet of Things (IoT), and the need for better business continuity and disaster recovery are driving a strong growth in storage and computing environments. Forty-seven per cent of respondents rated virtualisation as the top reason for growth in data centre capacity (see Figure 3). In Japan, 62 per cent of respondents said data centre budgets will remain flat in 2014, so it's not surprising that among the Asia-Pacific firms surveyed, Japanese businesses also rated highest in deploying consolidation and virtualisation initiatives.
- › **Asia-Pacific firms will source their IT infrastructure within hybrid environments.** Firms will use a mix of private and public cloud services to meet business demands, including the need for IT infrastructure that is always on and can be instantly provisioned, as well as secure computing environments and consistent application performance. Seventy-eight per cent of respondents in Singapore and 69 per cent of those in Japan want to outsource their IT in some capacity, by colocating, fully outsourcing, or using infrastructure-as-a-service (IaaS) or managed services.

FIGURE 2

Data Centre Budgets Will Grow In The Next 12 Months

“How do you expect your firm’s spending on data centre facilities to change over the next 12 months?”



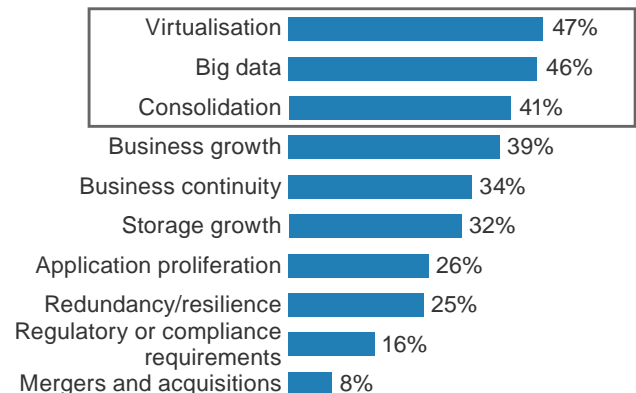
Base: 267 senior-level Asia-Pacific decision-makers with responsibility for decisions involving data centres

Source: A commissioned study conducted by Forrester Consulting on behalf of Digital Realty, February 2014

FIGURE 3

Firms Will Optimise And Consolidate Their Technology Infrastructure To Support The Business

“What do you believe are the greatest drivers for data centre capacity growth today?”



Base: 267 senior-level Asia-Pacific decision-makers with responsibility for decisions involving data centres

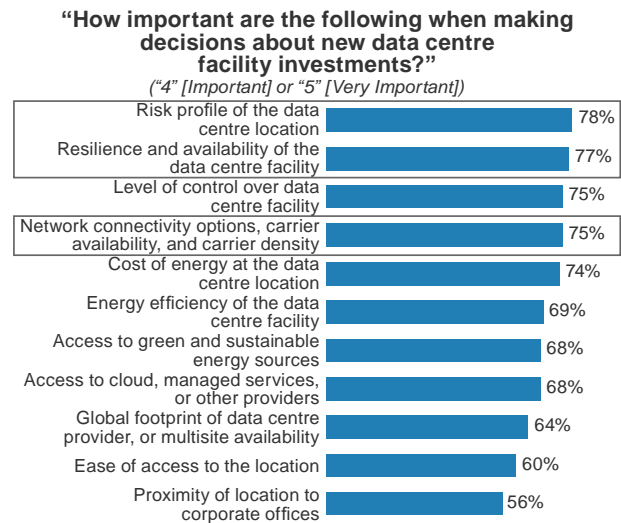
Source: A commissioned study conducted by Forrester Consulting on behalf of Digital Realty, February 2014

Security Concerns And The Need For Control May Keep Many Facilities On-Premises, But That Isn't Necessarily The Best Solution

Asia-Pacific firms are most concerned about risk profile and resilience when selecting data centres. Seventy-five per cent of respondents rated the level of control over their data centre facility as an “important” or “very important” evaluation criterion (see Figure 4). With this in mind, it is not surprising that 38 per cent of firms plan to locate their next data centre within 100 miles of their headquarters (see Figure 5). We found that:

- › **Firms that have outsourced their data centres have significantly improved the physical security of the data centre.** Global enterprises with regional headquarters have made use of remote infrastructure management capabilities that allow them to handle most tasks from remote offices. These firms use vendors to support specific tasks such as on-site equipment replacement or ejecting and inserting tape for off-site archival.
- › **In mature markets such as the US and Australia, firms prioritise network capabilities to support future business growth.** Networks must be transformed so they can support new features, including digital platforms, bring-your-own-device (BYOD) policies, big data, and the Internet of Things, and the associated growth in data and storage needs. It is the right time for firms to provision low-latency, high-speed connections between their data centres.
- › **Decision-makers are very aware of cost-related factors.** Despite this, nearly 31 per cent of firms in the region said that power usage effectiveness (PUE) is not important to them or they are not familiar with it. With growing awareness and regulation of carbon footprint reduction, and increasing power tariffs, firms will need to look to partners that can manage data centre infrastructure in the most optimal manner.

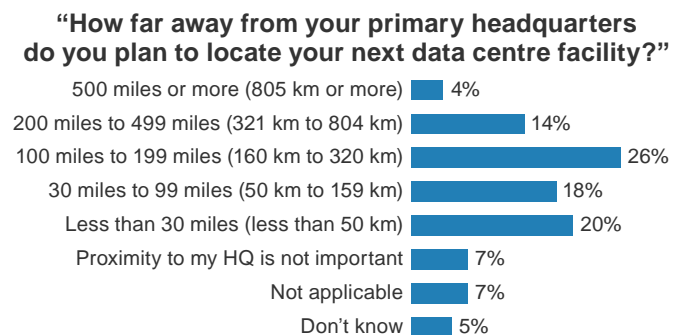
FIGURE 4
Data Centre Location And A Disaster-Resistant Facility Are Important Selection Criteria In The Asia-Pacific Region



Base: 267 senior-level Asia-Pacific decision-makers with responsibility for decisions involving data centres

Source: A commissioned study conducted by Forrester Consulting on behalf of Digital Realty, February 2014

FIGURE 5
The Overwhelming Majority Of Respondents Plan To Locate Their Next Facility Within Their Home Region



Base: 267 senior-level Asia-Pacific decision-makers with responsibility for decisions involving data centres

Source: A commissioned study conducted by Forrester Consulting on behalf of Digital Realty, February 2014

Key Recommendations

Your organisation must strategically source its IT infrastructure. The future will involve a mix of private cloud, hosted private cloud, virtual private cloud, and public cloud. Firms will continue outsourcing their data centre services to support business initiatives and provide seamless access to computing resources from anywhere in the world. The majority of respondents said they will build new data centres over the next four years. Some applications will remain on-premises, such as those that need to perform consistently, have stringent data privacy requirements, or are interdependent on other applications, tools, and critical processes. However, companies will source their data centres from vendors that can support high power densities, provide low-latency and high-speed interconnects, and have a low risk profile for disaster. When making decisions about data centre investments, you should ask yourself:

- › **How does my company want to pay for data centre facility space?** Should you make a larger capital investment with smaller operational expenses over time, or would you rather pay higher, ongoing operational costs with little to no upfront investment? As capital allocation priorities often favor one solution over another, you should prepare to defend your preferred solution, providing comprehensive details around costs, risks, and strategic benefits.
- › **Is owning and operating a data centre a strategic differentiator for my company?** As the quality, security, and regulatory compliance of outsourcing providers continue to improve, more organisations will consider outsourced solutions and will need to evaluate the impact on employees, skill sets, and the overall organisation. Does your business want to continue to invest in data centre capabilities, or would you rather redistribute staff into more strategic roles?
- › **How effective is my organisation's capacity planning?** How confident are your capacity predictions for the next five years? What about the next 15 years? Considering the constant uncertainty in the market, you should incorporate flexibility and scalability into your capacity planning so your organisation can accommodate change in the future.
- › **What is my organisation's risk tolerance and culture?** Do the risks associated with large capital investments and uncertain future capacity requirements outweigh the need for direct oversight over your data centre? You will need to determine how much financial and operational risk your organisation will tolerate, and consider how you would manage this risk using contracts and service-level agreements (SLAs).

Prioritise steps to optimise and consolidate your organisation's IT infrastructure. Firms will need to optimise and consolidate their IT infrastructure if they want to move workloads efficiently and keep budgets balanced to support new business initiatives such as mobile, digital, big data, and the IoT. It's important to remember that optimisation is not just about cost. In today's digital age, businesses compete around the clock on a global stage, making system availability, data sovereignty, and application performance more vital than ever before. Firms will need to embrace technologies such as virtualisation (which allows automation and better resilience) and high-performance network topologies (which support high-compute densities and allow for shifting workloads).

Appendix A: Methodology

In this Digital Realty–commissioned study, Forrester conducted an online survey of 1,030 organisations in Australia, Canada, France, Germany, Hong Kong, Ireland, Japan, the Netherlands, Singapore, the US, and the UK, to evaluate their data centre investment plans and drivers. Survey participants included senior-level decision-makers in IT, finance, and line-of-business roles who were responsible for decisions regarding data centres. Respondents were offered a small incentive to thank them for participating in the survey. The study began in January 2014 and was completed in February 2014.

Appendix B: Supplemental Material

RELATED FORRESTER RESEARCH

“Build Or Colocate? The ROI Of Your Next Data Center,” Forrester Research, Inc., August 20, 2013

“Strategic Benchmarks 2014: Data Center Strategy,” Forrester Research, Inc., May 29, 2014

Appendix C: Endnotes

¹ Over the past two years, the average volume of data held by enterprises in North America and Western Europe increased almost 50 per cent, from about 2,200 terabytes (TB) to 3,200 TB. The fastest growth was in unstructured data. Source: “Hardware Trends 2013: Data-Intensive Firms Lead Adoption Of Next-Generation Computing,” Forrester Research, Inc., June 24, 2013.