Power Business Innovation and Agility with the Right Server

For productivity, data protection and more, servers give small businesses an advantage

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Introduction

IT decision-makers at small businesses typically wear many hats, often splitting their time between various aspects of technology, management of day-to-day operations, and business strategy. With that constant constraint, modernising your IT infrastructure may not be top-of-mind, but for a host of reasons should be a priority. Even—or especially—for the smallest of businesses, utilizing a server-based infrastructure can increase security and reduce downtime.

Even minor downtime or data loss (especially loss of sensitive personal information) can cost your business thousands of dollars, and spark reputational loss. Well-secured, up-to-date systems help guard against unintentional loss as well as criminal attacks, serving to protect business data and minimise downtime. The business benefits of modernisation go far past preventing loss, though: an IT infrastructure powerful enough for today's processing needs can keep your business productive even when dealing with huge amounts of data or sudden spikes in demand.

Dell Technologies recently surveyed more than 300 IT professionals at small businesses in the Asia-Pacific region (including Australia, New Zealand, Malaysia, and Singapore)* to better understand their organisations' IT transformations, and their knowledge of cybersecurity. This eBook offers insights into their current attitudes and offers practical advice about protecting data and advancing modernisation with an intelligent server infrastructure.

> **Servers, simply put:** A server is a powerful computer equipped to centralise, organise, and store data securely, and to support a range of modern workloads.

One conclusion: In the context of today's work-from-home IT environment, often with IT infrastructure that has been hastily converted from a conventional office environment, small businesses especially could benefit from the advantages of adopting or upgrading servers.

Not sure where to start? You're not alone: More than 50 percent of small businesses in the Asia-Pacific region are still early in their IT modernisation journeys and have not yet selected or implemented a modernisation or refresh solution. This is especially true for companies of less than 10 employees—by far the largest business category in the region. In fact, 33 percent of these businesses say they have no plans to refresh their servers within the next two years—and 12 percent of them simply don't know.* The truth is that there are many paths forward. Starting with an infrastructure based on Dell PowerEdge servers, though, gives a foundation for a wide range of improvements that you can layer as your business needs demand.
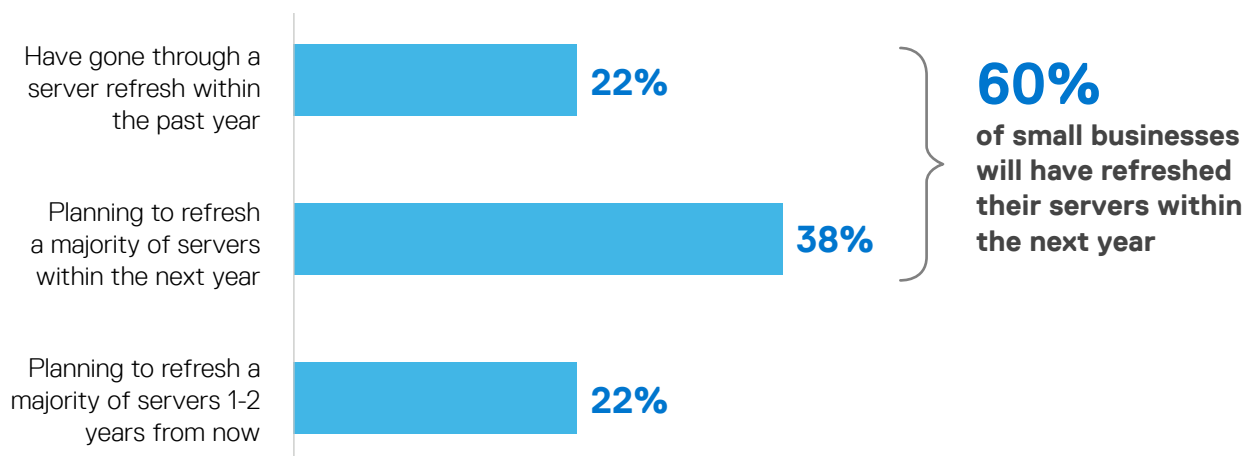
CHAPTER 1:

Remote Work and Market Trends

The most radical change in workplace technology in the last few years is an ongoing one, with ongoing repercussions. The shift to remote—driven by a combination of government mandates, practical necessity, and an interest in meeting employee demands for convenience and workplace safety—has dominated every aspect of IT for more than two years.

In one study, 47 percent of businesses say the pandemic has permanently accelerated digital transformation and spurred the adoption of emergent technologies; 43% of technology leaders expect over half their staff to remain working predominantly from home.[1] And already, 43% of employees across the region have the option to work remotely. While many workplaces expect a full return to conventional office work, more than 60 percent of small businesses surveyed across the region plan to retain work-from-home (or work-from-anywhere) policies for at least some of their employees.*

The radical move toward a distributed workplace has affected the entire region as well as businesses worldwide. Whether in a fully distributed environment, or a hybrid one that means some in-person work (but with part-time or flexible remote work possibilities), the sudden development of remote work for any position where it can be sustained has upended the conventional workplace.

Employees may now be interviewed and hired without ever visiting a conventional office, and employees who do come to an office may have their computing support provided by an administrator working from home, or show up in person only part-time. The radical revamp of business computing has also opened the door to more widespread cyberattacks, including ones that exploit insecure networking links and commodity, cloud-based communications tools. As a result, our survey found that cloud infrastructure, service providers, and security are the top three areas in which small businesses are looking to adopt technology most rapidly, reflecting their remote work needs, fluctuations in demand, and recently disclosed breaches.*

Have gone through a server refresh within the past year	**22%**
Planning to refresh a majority of servers within the next year	**38%**
Planning to refresh a majority of servers 1-2 years from now	**22%**

60% of small businesses will have refreshed their servers within the next year

Percentage of respondents rating each criterion as one of their top four priorities.

CHAPTER 2:

Small Business Security

In simple terms, small businesses face the same kind of security concerns that large enterprises do: keeping data readily available to authorised users, and out of the hands of intruders. Constantly evolving cyberattacks threaten both of these needs.

More than 41 percent of organisations have experienced increased incidents during the pandemic, mainly from spear phishing and malware attacks.[1]

Both targeted attacks and automated malware, though, can pose a larger threat to small businesses, because smaller operations have fewer personnel whose time can be devoted to preempting attacks, or to dealing with their consequences.

Cyberattacks can affect any organisation with systems that feature vulnerabilities in their installed software, or whose users inadvertently click on a malicious link. Larger organisations, however, are more likely to have more robust security measures and practices in place and to have backup systems in place if their data is rendered unusable by an attack.

When data or systems are compromised, particularly if data is made inaccessible by a ransomware attack, the most effective antidote is having full, recent backups. Smaller firms often have either no backup system or only a piecemeal, rudimentary approach to backup.

Linking end users via encrypted connections to a central server on the network rather than relying on securing only individual PCs is one way to sidestep many potential threats.

Because a server-based infrastructure stores your important data in one or just a handful of places, it means fewer systems need to be locked down to be sure data is both protected and consolidated for backup. So administrators can focus their efforts on keeping servers secure, as well as the links between those servers and individual endpoints. This is an especially effective strategy when not only data but applications are server-based, shrinking the total attack surface vulnerable to intruders.

TOP CONCERNS IN AN EVOLVING THREAT LANDSCAPE

Complications with unsecured wireless connections	**Named by 29% of respondents**
Keeping up with new threats and tactics	**Named by 27% of respondents**
Inadequate backup and recovery systems	**Named by 25% of respondents**
Lack of security awareness among remote workforce	**Named by 25% of respondents**
Increased susceptibility to phishing attacks	**Named by 23% of respondents**

And in the event that cyberattackers manage to compromise your systems, data that has been centrally stored on a server and backed up can be readily restored. This adds resiliency: recovery from an attack from backed-up server data is far smoother than trying to recover individual file sets from each affected PC or drive.

Investing in Success With a Server Infrastructure

It's easy to think of servers as simply distribution points for common data, or as central repositories for data to be backed up. However, easy backup and data distribution are only two of the productivity benefits a server-based infrastructure delivers, compared to one based primarily on individual PCs.

A server-based system can free users and administrators in ways that would be far more expensive to achieve by upgrading individual PCs. End-user devices also need to be kept current and also require ongoing attention to security, but a single technology investment in one or more servers provides advantages to every connected user.

These include:

COLLABORATION: Servers can connect users through dedicated communication and collaboration software, so on-site as well as remote employees can transparently share files and data sources, securely conference with each other and with customers or suppliers, and work on shared documents. By deploying a server, you gain control over the software that connects your network, and have the widest choice of business-wide collaboration platforms. A server uniting your company's users can also serve as a gateway to web-based communication services, not just local software.

REMOTE COMPUTING: Because servers are provisioned with enough power to support multiple users, many workloads that might bog down a user's PC can be run instead on the server. This eases support and enables faster scaling, too, because you can upgrade every user's experience by expanding the storage, RAM, or computing power of your server in one go, at one location.

VIRTUALISATION: One specialised application of remote computing that can be especially beneficial in a distributed computing environment is virtualisation. Servers' greater memory and processing capacity means that they can host virtual machines, rather than adding new physical computers with their own chassis, physical memory, storage hardware, and video outputs. Virtual computing offers advantages in organisation and specialisation: a virtual machine can be spun up on a server for testing purposes, to segregate workloads from each other, or to allocate more resources to your most important database.

GREATER SECURITY: Servers not only are built for greater physical security than are typical desktop PCs or laptops, but they run robust operating systems ready for enterprise-class software. Often, servers are built with inbuilt encryption support, too, so attackers are less likely to gain from stealing data stored on them. Servers can also serve as security checkpoints, acting as secure gateways to external cloud services.

LOWER DOWNTIME: The components of any IT system are subject to failure, but server-class hardware is designed for reliability, with everything from long-lived components to chassis designs that maximise airflow. Many servers are also built to minimise service interruptions even in the case of required maintenance or upgrades, with hot-swap components, ultra-reliable memory, and redundant storage.

CHAPTER 4:

Server Strategy: When is the Right Time for a Server?

For nearly any business operating today, the best time to move from an environment based on individual PCs and laptops to a server-based system is now. And for businesses that have adopted servers already but have not reexamined their IT infrastructure recently, the radical workplace changes of the last few years means that it's time for them to take a critical look at their systems to consider the most efficient upgrades.

IS IT TIME FOR A SERVER?

The factors that determine whether a server makes sense for your business are the same ones that drive your everyday IT decisions.

- Do you need to support remote employees?
- Do you use or anticipate using a mix of cloud and local storage?
- Do you store any data (such as personally identifiable information) that requires heightened protection?
- Does your business experience demand fluctuations that strain individual PCs?
- Are you seeking to back up data centrally, rather than per end-user?
- Have you had to recover from any data-loss event such as a cyberattack or hardware failure?

If the answer to any of these is Yes, a server infrastructure may help simplify your IT environment by increasing the power available to users, centralising control of your computing systems, and shoring up potential security holes.
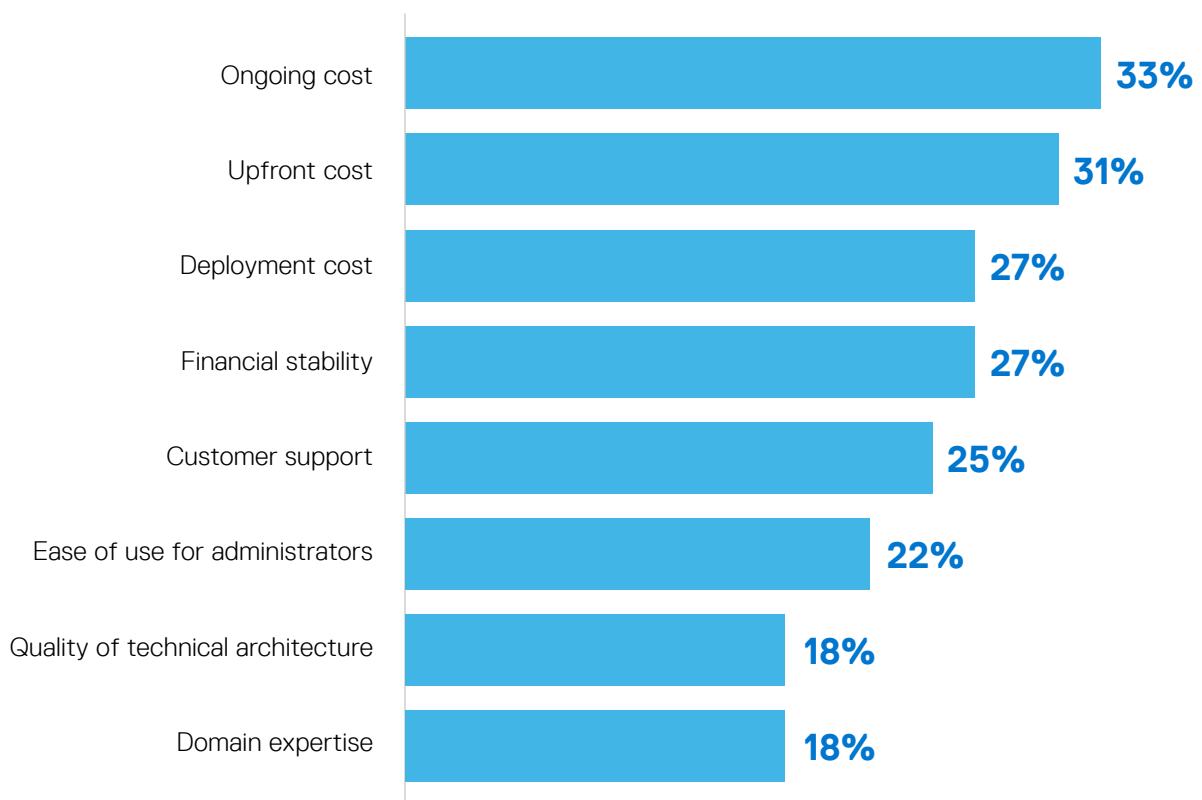
Businesses today may be wary of investing in servers as the scope and adoption of cloud services continue to increase, but this is a false dilemma. Cloud software can offer great efficiencies, but the centralisation of computing that servers deliver to a small business helps create cloud efficiencies. In many cases, a server can serve as an intermediary for your business's users, even if they are accessing cloud-based as well as local software.

Increasingly common are hybrid cloud environments, where a mix of cloud and local software are employed simultaneously. Cloud-based services may be employed for data backup, for instance, while servers on the local network store data that needs to be highly available. You may choose a system using your own servers for most computing needs, too, but with the ability to access cloud-based virtual machines when necessary to accommodate spikes in demand.

Depending on your use case, servers may allow you to radically decrease the number of licenses you need for cloud software, or be able to leverage cloud-based services to act on locally stored data.

HOW SMALL BUSINESSES ARE SELECTING INFRASTRUCTURE SOLUTIONS & PARTNERS

(Percentage of respondents rating each criterion as one of their top four priorities)

Criterion	Percentage
Ongoing cost	33%
Upfront cost	31%
Deployment cost	27%
Financial stability	27%
Customer support	25%
Ease of use for administrators	22%
Quality of technical architecture	18%
Domain expertise	18%

End-to-End Services: A Competitive Advantage

IT is crucial to your business, from administering email to selecting software to securing connections with customers and vendors—but maintaining an IT team large enough to handle efficiently all of the tasks it's called on for may be impractical.

Remote access to your in-house infrastructure means that it's also not necessary. With servers under your direct control, you can delegate access to take advantage of expert services. Being able to take advantage of outside experts is one of the best reasons to choose a server-based IT system in the first place. A server provider should therefore be selected only partly for the hardware it provides. At least as important are the support capabilities of the vendor you select: you want your server provider to serve as a trusted advisor.

Why is this advisory role crucial? Small-business decision makers report that understanding the scope and complexity of requirements, and a lack of expertise in key technology solutions, are two of the top five challenges they face with modernising their infrastructure. This is particularly true for businesses with 10 or fewer employees in total, because their expertise and attention are called on constantly in all parts of their business, not just IT.

Similarly, in building a hybrid work environment, decision-makers describe two similar top-five challenges which complicate deploying cloud technologies: limited expertise in migration procedures, and lack of a strong understanding of how their applications relate to their business environment and infrastructure. In both areas, an experienced provider can help, no matter the size of the organisation.

Whatever vendor you select, another advantage of a server-based infrastructure is centralisation not just of your actual data storage, but of the services and software that every user in your IT world depends on. With a server in place, upgrading it can deliver benefits of that upgrade to every user whose data or workloads reside on that server.

Whether to tackle day-to-day administration, or as needed to extend your team's expertise with software upgrades, applying security measures, or planning your next infrastructure moves, selecting from the full range of Dell PowerEdge servers means you can take advantage of expertise embodied in both industry-leading hardware and end-to-end services from Dell.

Nearly 20 percent of small businesses are unaware of support services or solutions from vendors to assist with migration.*
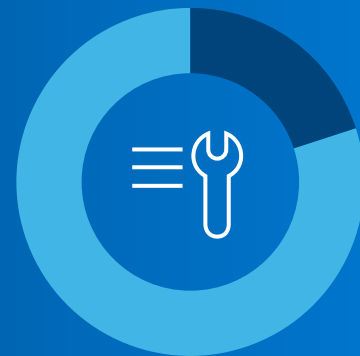
Dell Technologies' long-refined line of PowerEdge servers, now in their 15th generation of innovation, enable small businesses to extend their IT capabilities and achieve IT modernisation without increasing their headcount, with capabilities including:

- **Compatibility with Dell OpenManage software**, offering advanced administration tools to unite and manage your IT infrastructure with intuitive interfaces, coupled with intelligent automation to reduce your IT team's workload

- **Integrated Dell Remote Access Controller (iDRAC)**, a powerful remote server management processor embedded in every PowerEdge server to simplify remote administration, for secure deployment, updates, and monitoring whether local or remote

- **A wide range of Dell-managed services**, from installation to labor-saving remote administration and security services

- **Extensive, globally available support**, for always-on help when you need it, including TechDirect to instantly request support of replacement parts online

- **Flexible payment solutions** to meet your budget needs, align use with costs, and help your organisation flexibly spin up or decommission the technology infrastructure you need

Conclusion

Technology leaders are more important than ever to business success; six in ten of them agree or strongly agree that their influence has grown as a result of the pandemic.[1] Now is the perfect time to exert that greater influence by taking a fresh look at servers as an engine for increased business efficiency and security.

For smaller businesses especially, servers are crucial in consolidating business information, uniting users with communication tools, backing up data across the business, deploying efficient computing power, and increasing security. With the help of Dell's trusted advisors and PowerEdge servers, a complete server-based infrastructure is in reach for every business, down to the very smallest. The largest part of those surveyed in our study—29 percent—represent businesses of fewer than 10 employees, precisely the ones who could benefit the most from planning and implementing server-based IT.

And critical to planning any kind of upgrade, the cost of servers can be spread over time with financing. That means that disruptive capital expenses can be converted into predictable long-term operating expenses for both hardware and selected software or services.

For technology and trusted advice for your small business visit one of the following:

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