NZ
Datacenter
Region

The Story So Far

Microsoft

Contents

Executive summary

Technology is increasingly the engine and enabler of work, government and society in Aotearoa, driving unprecedented demand for cloud services. Investment in public cloud in New Zealand is estimated to grow from $1.7 billion in 2020 to more than $3.5 billion in 2024.

Microsoft's hyperscale datacenter region has the potential to super-charge New Zealand's digital transformation, boosting innovation and productivity while helping local organisations reduce the environmental impact of their IT consumption. Research shows Microsoft cloud services are up to 98 per cent more energy efficient than traditional enterprise datacenters.

Best-in-class security gives Kiwi tech companies the confidence to explore and innovate with new technologies, and enable collaboration and growth at a scale and speed beyond anything we've seen before. Together, this will support a thriving, more resilient economy that benefits the whole of New Zealand.

To enable New Zealand to reach its full digital potential, Microsoft is also investing in preparing our workforce, equipping workers and students with the skills to make the most of what the datacenters offer, from cloud and analytics to AI.

The datacenters are more than infrastructure and services. They're our investment in better outcomes for every New Zealander and every organisation in Aotearoa.

Our datacenter region has **3** **separate sites** supported by **2 gateways**

We spend **$1** **Billion annually** on cybersecurity

Cloud spend will **Double** in growth to **$3.5** **Billion** By 2024

102,000 **New jobs** created over the next 4 years

100% **Carbon Zero** from day one

98% **emissions savings** over traditional infrastructure

Bringing our hyperscale cloud to Aotearoa

There's a lot of talk about the opportunity local datacenters create to accelerate growth and innovation. But it's not well understood exactly what a hyperscale datacenter region actually is, or does.

With this in mind, we wanted to share more about the scale, security, smarts, and innovation that our hyperscale datacenter region will offer to Aotearoa.

A hyperscale datacenter is not your average warehouse of servers. IDC defines "hyperscale" as a datacenter bigger than 10,000 sq ft, while Synergy Research Group says the hallmarks are not just size but ability to scale up on demand and use energy efficiently. By either measure, it needs to be massive, scalable and sustainable. Microsoft's datacenter region will have 3 connected sites of this size each in New Zealand to meet all those criteria – and then some. Here are the benefits you can expect:

A sustainable and local home for New Zealand's data to meet residency requirements

By building hyperscale cloud, Microsoft is creating a safe and secure home for New Zealand's data, on New Zealand shores.

Organisations that require data residency, or have high data compliance needs, will be able to host their data locally, enabling some businesses, like those in the public sector, to embrace cloud technology for the first time, compliantly.

We're focused on building a sustainable future through our own ambitious climate goals and by helping others use our technology to achieve their climate goals too. By using sustainably-built tech, business can reach their own suitability goals faster.

We have sustainability firmly in mind as we build our hyperscale datacenter region. It will be built to our latest design, seeking LEED cert, UL waste cert and powered by 100% carbon free energy from its opening, provided by our Kiwi electricity partner Ecotricity.

A secure and trusted network

We are enabling public cloud data to be stored securely right here in Aotearoa, where it will remain under the ownership of our customers. Unlike many other public cloud providers, this data stays in Microsoft's network.

This is underpinned by the most comprehensive cybersecurity foundation of any company in the industry. We spend $1B on cybersecurity annually and have 8,500 security professionals analysing and responding to security threats 24/7.

We've evolved Azure, Microsoft's cloud, into the industry's only cloud that seamlessly empowers customers to operate hybrid/multicloud environments. Azure covers 91 compliance offerings. Our commitment to end-to-end security means our customers' workloads are protected wherever they live.

Totally resilient operations

Continuity of critical operations is integral to the success of any organisation, so our local datacenter region will comprise three separate sites, supported by two more separate gateways, in multiple locations, with multiple fibre connections along multiple routes.

The way our hyperscale datacenter region is set up ensures no data needs to be backed up offshore and operations are totally resilient. This is world-class infrastructure, the likes of which this country has never seen before.

The most comprehensive platform for Kiwis to innovate, create, disrupt and transform their businesses and industries

Our hyperscale datacenters give New Zealand businesses the tools they need to create innovative new technologies that will help create the New Zealand of tomorrow. It will enable New Zealand to deliver digital transformation at a speed and scale unlike anything we've seen before.

As we pursue our purpose to create technology that benefits people and the planet, we share our technology, our resources, our approach, and our learnings with our customers and partners to help them achieve their own goals for a better future.

We recognise that to drive further innovation in the cloud, we also need to have people with the right skills to reach our potential. We're helping address the skills shortage by funding programmes to attract a more diverse workforce and provide the digital skills Kiwis need to make the benefits a reality.

Our sustainability commitments

Globally, we made a promise to not only go carbon neutral, but carbon negative by 2030. By 2050, we aim to have removed all the carbon we've ever produced from the environment.

Sustainably powering our datacenters is an important part of this, which is why our hyperscale datacenter region will be powered by 100% carbon free energy from its opening.

In New Zealand, we're determined to unlock huge new opportunities for local businesses and society through better access to efficient, cutting-edge technologies, while making our local datacenter region the most sustainable yet.

Worldwide, we're also on a mission to protect more land than we use by 2025 and be water positive by 2030 – replenishing more water than we consume. So, what does this mean for water use in Aotearoa? Our local datacenter region will be water-free and will be using air cooling to store your data at the right temperature.

In some regions, Microsoft is also piloting running backup generators with renewable blend, cleaner burning fuels, and is also piloting the replacement of datacenter generators with long-duration batteries. Microsoft operations in New Zealand comply with applicable air quality requirements.

Carbon negative by

2030

By 2050 we're aiming to remove ALL carbon we've ever produced

100%

Carbon free energy

For our hyperscale datacenter region from the start

100%

air cooling

Our local datacenter region will be water-free

Microsoft customers in Aotearoa

Fonterra

Will migrate all mission-critical operations to the Microsoft Azure cloud platform. It will give the business the ability to achieve greater resilience and agility. The new platform aims to bring together all parts of Fonterra and build a culture around data. By capturing and integrating data across the organisation, this will create a foundation for actionable insight and enable Fonterra to deepen its relationships with farmers and customers, optimise its supply chain and manufacturing operations and deliver better products and services.

BNZ

Will be using Microsoft's datacenter region to migrate over 10,000 apps that assist with compliance, driving the creation of better products and services. The migration is the biggest technical migration project in BNZ's history and it's anticipated it will create better, more reliable and more powerful experiences for BNZ customers and pave the way for new digital tools that will allow them to do more.

PwC

Will bring PwC and Microsoft's Global Alliance to New Zealand allowing firms around the world to support clients pursuing large scale digital and business transformation, enabled by Microsoft technology. PwC is expanding its NZ technology team and expertise, providing Kiwi clients with access to over 3,400 of PwC's Microsoft certified professionals.

ASB

Will migrate hundreds of its applications and thousands of its servers to the cloud, which will create significant efficiencies and deliver a range of benefits including increased agility, resilience and security. Shifting to the cloud is a core part of ASB's digital transformation ambitions. Storing the vast majority of servers and applications in the Azure cloud will allow ASB to deliver even better digital experiences for its people and customers that are faster, more personalised, and more reliable than they are today.

Auckland Transport

Will migrate its data and computing from on-premises servers to Microsoft Azure cloud. AT plans smarter use of resources: using less of the planet's precious resources, optimising operations and increasing its internal capability to make the most of data and modern technologies.

ACC

Will migrate its New Zealand operations to Azure, to enable more linked-up use of data, so it can provide better pathways through care and deliver more equitable health outcomes throughout Aotearoa. The arrival of Microsoft's hyperscale datacenter region will enable sensitive patient data to be stored within New Zealand's borders. As New Zealand's population grows, the virtually unlimited capacity of public cloud will also enable ACC's data storage and processing capabilities to scale up along with it, without needing to invest in new infrastructure.

Local case studies

We are already doing great work with so many innovative customers and partners in New Zealand and beyond, harnessing the power of Azure cloud.

asBuilt

Digital construction specialist asBuilt is transforming the building industry with its Azure-based platform that creates **connected construction sites**, boosting health and safety on site, while also reducing waste and cost by creating **digital twins** of each building to enable much more precise placement of essential components. The asBuilt Vault is also creating fully 3D, real-time models of essential infrastructure such as **Auckland Hospital**, making it possible for site owners to map how buildings are used and optimise spaces according to how people move throughout them, or monitor when assets are due to be repaired or replaced.

Soul Machines

Soul Machines chose Azure to build its main stack on so it could continue to develop, innovate, scale and grow. Since migrating Soul Machines' applications to Microsoft Azure, it has been collaborating with Microsoft on new products that take the use of AI in entirely new directions. Soul Machines has already developed celebrity Digital Twins of entertainer and singer Will.i.am, NBA All-Star and entrepreneur Carmelo Anthony, and pro golfer Jack Nicklaus, as well as creating Digital People to deliver highly personalised brand experiences for Nestle, Toll House, P&G, Twitch, The World Health Organization, The Pan American Health Organization and more. The **AI-powered 3D Digital People** can move and interact with on-screen content, delivering highly personalised, engaging, and empathetic experiences in real time thanks to Azure.

Rocos

Auckland robotics business, Rocos, is built on Microsoft's Azure cloud, and is used by customers in over seven countries. Using Azure allows Rocos to reach those customers wherever they are, leaving the platform management to Microsoft. **The cloud platform** allows robotics engineers to manage multiple robots at once, breaking the one-to-one relationship between engineer and robot which was once required.

Auror

Auror has **revolutionised crime prevention** in retail with its Azure platform. When looking for a technology partner to build its masterpiece, Auror chose Microsoft Azure for its ability to scale, resiliency and Microsoft's global network. Less than 10 years later and the business has gone from having just four customers in New Zealand, to more than 30,000 around the globe, including the world's largest retailer, Walmart. Retail partners have a preference for Microsoft Azure and it provides Auror with the platform and infrastructure to easily scale and deploy into new markets like the US, Canada and the UK.

Interested in your cloud options?

For more information please visit our Microsoft NZ datacentre website:
news.microsoft.com/aotearoa-datacenter

Further reading:

1. **Conscious cloud: our Aotearoa datacenter pledge Microsoft's datacenter region powered by 100% carbon free energy from day one**
2. **Making your multi-cloud platforms work for you**
3. **Worth the hype: why it's Aotearoa's turn for a hyperscale datacenter region**
4. **How the cloud could create thousands more jobs**

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