

Whitepaper

# Cloud Migration and Contact Centre Solutions



WHICH-50

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NEC has delivered world-class technology solutions and services to customers across the globe, for more than a century. For over 50 years in Australia, NEC has built a sophisticated technology and anything-as-a-service company which brings together the best technology and the best people to ensure our customers capture maximum value from their IT and networking investments.

NEC connects people through reliable communication infrastructure while also helping to keep communities safe and secure with intelligent surveillance systems and the world's leading biometrics identification technologies.

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# Cloud Migration and Contact Centre Solutions

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# Introduction

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Contact centres are increasingly central to supporting the end-to-end relationship which organisations have with their customers. This is as true for large private organisations as it is for public sector organisations, even if their respective motivations differ.

Government agencies need to think about collecting and securely managing data from customers and other agencies, to be accountable for how they spend taxpayer's money, and ensuring the stability and availability of critical systems.

In enterprise organisations the focus is often on tools for maximising the performance of sales teams, securing sensitive customer information and raising productivity of office employees.

Organisations of all kinds increasingly realise agents are the front line for customer experience.

Investments in contact centres can have a profound impact on customer experience and drive brand loyalty, frequency of purchases, reduced customer churn or lower operational costs.

**Today, nine out of 10 organisations see customer experience as their key differentiator.** The challenge is converting these vision statements to executional strategies. This is where the contact centre can play an outsize role. The disruption boom has also caught up with the contact centre. Many organisations are still running on-premise installations made up of a jumble of point solutions and associated integration headaches.

The latest Cloud platforms consolidate these solutions into one centralised model, with all the data in one location. This allows organisations to use more powerful analytics to find insights to improve performance, lower costs and boost the customer experience.





# Drivers of Cloud Migration

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Government and enterprise organisations share similar business drivers for moving to the Cloud. These are usually around cost, risk, speed to innovation and improving the customer experience.

The most commonly cited advantage of enterprise Cloud is the reduction in capital expenses and total cost of ownership (TCO). An organisation doesn't need to worry about building or operating a fully redundant service in datacentres, hiring staff to manage it, or holding responsibility for major software upgrades. These costs and obligations are all passed on to the software vendor.

Anecdotally speaking, the costs could amount to 30 or 40 per cent of the initial purchase, according to NEC account director, customer engagement, Dale Ware.

**"The set-up costs for Cloud – and this is just indicative – would be half that because the infrastructure's already preconfigured. All you are really setting up is some configurations and connectivity instead of a full new system."**

It also makes it much faster to get moving. An on-premise set-up could take six months to install, he says. On-premise systems require more management including annual reviews of software and hardware and the headache of upgrades.

But organisations also can reduce expenses through the consolidation of previously separate components into one package. The previous burst of innovation introduced concepts such as workforce optimisation, basic AI and standard analytics.

Now the market has matured, these concepts can be bought as features in a suite rather than separate products, bringing down the total cost of ownership.

**"You only pay for the types of functions you use. That is definitely a financial benefit,"** Ware says. CIOs charged with maximising the return on the technology dollar can reduce operational costs further with a Cloud system through easier analysis of contact centre volumes and performance.

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Dale Ware,  
Business Development Manager, NEC

# Drivers of Cloud Migration

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This includes responding to spikes in volume, increasing or decreasing staff for public holidays or simply reducing the number of idle agents over a standard week.

Companies can modernise their practices by offering a **‘work from home’** capability, which is fast becoming the norm, and a necessity for attracting top talent.

Remote working capabilities also provide companies with that ability to call in a workforce on short notice should an event occur, without having to overcome any major logistic hurdles.

Easier workforce optimisation results in faster calls and a more satisfied customer, according to Ware.

Organisations are also looking to reduce risk. This comes in many forms, not least vendor lock-in at a time of rapid change among providers. If you had committed to an on-premises call centre vendor five to 10 years ago, you are still sweating that purchase. And some major vendors have disappeared from Gartner’s quadrant reports in that time because they failed to invest in R&D and the Cloud.

**“As the market changes, will the vendor have the ability to change that solution to reflect new priorities, and lead in that space?”** NEC Australia senior solutions architect, Riaan Van Zyl, asks.

CIOs want to reduce the risk of managing upgrades themselves.

The vendor takes responsibility for managing upgrades in a Cloud environment.

The upgrades happen invisibly in the background and are protected by fully backed up and redundant systems. If this triggers more demand for CPUs, storage or bandwidth, the vendor increases its consumption within the Cloud datacentre.

A third driver is the speed of innovation. Thanks to the afore-mentioned constant upgrade cycle, organisations will always be on the latest and greatest version of the software.

If a new channel becomes available such as taking inquiries via WeChat or WhatsApp, an organisation can turn on the service without having to think about integration issues, according to former chair of AusContact Australia and Data Synergy non-executive chairman, Michael Terry.

These three business drivers – reduced cost, reduced risk and faster speed to innovation – all support the fourth driver, improving customer experience. The next wave of technologies such as AI-driven customer profiling will be much easier to test and roll out with Cloud solutions that have extensive APIs.

Given the importance of customer experience to sales, loyalty, and retention, it is essential that organisations move to a Cloud environment.

The only question is when?



Roadblocks

# Roadblocks

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Enterprise and government organisations face a range of impediments in moving to the Cloud. They include security, consolidation, managing technological debt and data sovereignty.

Sometimes migrations are complicated by technology stacks built by piecemeal decisions, often made by predecessors in management.

The task of sorting out how applications are integrated and replicating the functionality in the Cloud requires a solid strategy. By making this move, however, CIOs can free themselves from mounting technology debt that threatens to undermine the stability of their on-premise installations.

Moving an enterprise or government contact centre to the Cloud is a mammoth task.

**“It’s somewhere between a huge pain and an enormous pain,”** Terry says.

It’s easier for contact centres that provide a five-day a week service, as the kinks can be ironed out over a weekend.

Migrating a 24x7 service means you will face the moment **“when you change it over and you cross your fingers,”** he says.

**“Unexpected delays in voice traffic are common, and require improvements to the call redirection setup.”**

A common problem is untying the jumble of applications from different vendors.

**“You may have a separate workforce management system, and a separate voice recording module for quality assurance, a separate router. Ensuring all the interdependencies are addressed is a complex issue,”** Terry says.

And a complex software stack is more difficult to operate on-premise compared to the equivalent in the Cloud.

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Data Synergy Non-Executive Chairman, Former Chair of AusContact Australia

# Roadblocks

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A great advantage of a unified Cloud solution is those modules are much easier to set up within the one platform.

**“The core data from all the systems goes into one platform removing the requirement for organisations to interface into other components and set up interdependencies,”** Ware says.

Analytics packages are highly attractive to contact centre managers because they can reveal opportunities to improve performance in every operational area.

The problem facing on-premise installations is that it takes a lot of time and money to integrate analytics into each module.

Most on-premise contact centres use a different provider for each module such as omnichannel routing, call recording, and workforce management. Adding analytics to each module requires integrating separately with each one.

**“You have multiple points of integration and it becomes quite complicated,”** NEC Australia national solutions manager, Jim Chryssikos, says.

Many of the initial concerns about the Cloud have receded in recent years.

Government agencies typically had reduced choices for operating contact centres due to data sovereignty obligations.

The restriction around keeping data within Australia gave agencies little choice but to commit to building expensive, on-premise installations.

Now, Cloud-based contact centres store sensitive data within Australian datacentres to ensure compliance. In fact, it has become easier to manage compliance issues in a Cloud environment that has a centralised platform for recording, managing and archiving calls and other data.

Initial concerns about security and Cloud-based services have also flipped. Organisations used to fear that other companies using the same Cloud service could access their files.

Today, CIOs are typically more concerned about the rising cost and complexity of providing security in their own data centres.

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Business Development Manager, NEC

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A contact centre vendor protecting the operations of hundreds of thousands of agents has a correspondingly larger security budget.

That's important when you need to consider measures such as enterprise encryption, fault-tolerant, distributed architectures, and an availability target of 99.99 per cent.

Security information event management (SIEM) is easier to deliver in the Cloud and provides organisations with the highest levels of security against real-time cyber threats.

This globally operated, 24/7 service uses endpoint to Cloud monitoring by highly accredited and skilled security analysts to provide earlier threat detection, incident response, and more effective remediation.

Another major roadblock for government agencies is internal resistance. A migration raises the possibility of interruption to service, and the last thing any agency wants is to become a news item.

"We have seen the potential political impact of a bad experience across various government agencies. After one or two bad experiences, suddenly the agency becomes political fodder in the press," NICE Systems managing director A/NZ, Gerry Tucker, says.

"Many of our clients want to initially move only a part of their infrastructure into the Cloud so they can trial it," Van Zyl says.

Organisations typically want to start with something that won't hurt, such as recordings or digital channels, or starting with a portion of the contact centre. This is possible with a cloud-based system, which reduces the pain and risk of migrating a contact centre.

"If I was running an organisation bigger than 100 seats, I would pick a department and transition just that department to cloud. Through an implementation such as this you can learn some lessons, understand the transition, and then be better placed to transition the rest," NEC's Van Zyl says.

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Gerry Tucker,  
Managing Director ANZ,  
NICE Systems



Customer Benefits

# Customer Benefits

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Once a government or enterprise contact centre has made the leap to the Cloud, it can start to enjoy the many benefits.

**“The first is the safety in numbers from using a shared facility. This includes better backups, power supply and connectivity to the internet,” Data Synergy’s Terry says. “There is greater reliability in a Cloud installation from a pure engineering excellence point of view.”**

The handover of responsibility for the purchase, maintenance, and operation of hardware frees up CIOs to look at strategies to improve customer service and reduce costs.

Chief among these strategies is the wave of innovation in artificial intelligence (AI).

AI applications have become far more advanced and can be applied to different areas of the contact centre to drive productivity or enhance customer experience.

AI can handle a greater breadth of customer inquiries and more complex requests.

**“The new applications are designed that as an outcome of each customer inquiry, the system gathers information about the customer” and evolves with each interaction, Ware says. “It’s true artificial intelligence, which it wasn’t in years gone by.”**

**“More than 30 per cent of contact centre interactions will be handled by AI within two years,” Flamingo AI founder and executive director, Dr Catriona Wallace, says.**

Moving to the Cloud and centralised databases also breaks open new opportunities in analytics.

**“On-premise installations are hampered by siloed data, particularly when using a collection of vendors. Big data analytics is designed to be much more user-friendly. Rather than just dumping statistics, they can show how customers are behaving,” NEC’s Ware says.**

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Account Director, Customer Engagement,  
NEC

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**“The centralised store of data makes it much easier to analyse data for patterns. Voice biometrics is much easier to achieve and approve in terms of governance because the same system already holds all the voice recordings,” NICE Systems’ Tucker says.**

**“Testing and trialling voice biometrics has worked for us, and it is going to work for our constituents and our stakeholders because that’s much easier to actually do.”**

Another major advantage of a Cloud-based system is the flexibility of service. Contact centre managers can switch analytics on and off for different modules.

A centre could switch on analytics for workforce management for two or three months to study spikes in volume or if the organisation is launching a new product or campaign.

**“Cloud-based platforms are much easier to adjust for managers wanting to action any insights gained from analytics,” Ware says. “The ability to move the needle becomes easier. You can change your workforce planning schedules, add more capability around certain channels or drive up interaction with self-service channels with a chatbot, for example.”**

Managers can then close the loop by switching on analytics again to measure the improvements.

One organisation using NICE CXone has tightly hooked in marketing to the contact centre. Every time the organisation launches a marketing campaign it switches on analytics to see the impact on the contact centre.

Rather than using analytics to diagnose problems with contact centres, progressive organisations are using it proactively.

**“Very often in the past, analytics was almost like an afterthought,” Tucker says.**

**“Now, when organisations launch a campaign they want to track that campaign and measure how well they are doing.”**

Marketers can then tweak campaigns to improve impact and ROI as they go. Government agencies could use a similar strategy when rolling out new regulations such as Single Touch Payroll, he says.

Cloud-based systems are also much better placed to deliver omnichannel that actually works.

While many on-premise installations are omnichannel in theory, they are hampered by managing data in multiple locations, applications, and formats.

Pulling the data into one screen for an agent to see during a call is much easier within one system.



NEC Solution

# NEC Solution

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The NEC CX Plus suite consolidates many modules that on-premise installations still operate and pay for separately. This includes workforce management, call recording, and omnichannel routing.

Contact centre managers have a far simpler set-up to operate with one vendor to contact. This eliminates the finger-pointing exercises of a multi-vendor installation when something goes wrong.

Managers can extend the single-supplier relationship even further by adding NEC's unified communications as a service phone system for staff outside the contact centre.

This system is integrated with CX Plus making it very easy for contact centre agents to transfer calls anywhere in the organisation.

CX Plus also integrates with existing on-premise and Cloud-based PBX's as well.

Analytics is infused throughout the platform. This gives contact centres consolidated insights across calls, email, social and other channels.

**"To do that on-premise would be a much more difficult and time consuming task,"** NEC's Chryssikos says.

Contact centres can use CX Plus as a base to experiment with new services that attach through open APIs.

This gives enterprise and government CIOs a very fast way to deploy new technologies without the associated CAPEX and integration costs of an on-premise installation.

An interesting use case is profile data.

The demand for highly personalised experiences is pushing organisations towards profiling of customers and agents.

When a customer validates themselves with a contact centre, providers can match a personalised profile of the customer and the intent behind the interaction. This makes it easier to find the right agent.

NEC can augment the power of CX Plus by integrating a number of innovations from its technology stacks. There is also an extensive range of analytics modules that can identify and reduce churn and monitor customer behaviour.

In 2020, NEC will release a unified communications-as-a Service (UCaaS), which will also integrate with CX Plus.

The Cloud-based PABX will provide integrated video and audio calls, unified messaging and conferencing for employees outside the contact centre.



# Conclusion

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Technology trends have already indicated that on-premise software will gradually fade into obsolescence. This is true across major software categories such as productivity – note the speed of Microsoft's transition from Microsoft Office on the desktop to Microsoft Office 365, one of the fastest-growing products in the company's history.

It is also true in backend technologies such as compute and storage.

Contact centre software is also at a turning point in the technology cycle. Too many organisations are still paying for individual technologies that are now features in a larger system. High software bills from multiple vendors constrict the amount CIOs can spend on the latest innovations that are desperately needed to deliver amazing customer experiences.

CIOs reviewing the strategic impact of technology purchases need to consider those that will have the greatest benefit on an organisation's ability to generate more revenue (in enterprise) or enhanced reputation (for government).

Migrating an on-premise contact centre to the Cloud can achieve a number of objectives at once. It removes the cost and risk with building and running your own systems. It opens the door to tighter operational performance, by monitoring workloads across multiple channels. And it gives CIOs a smorgasbord of technologies to experiment with that can have a direct impact on marketing, sales and customer support or success.

The path to a Cloud migration is far easier than changing vendors in an on-premise installation because it can be done piecemeal. CIOs can test the TCO and ROI for a single department before committing to moving the bulk of the centre.

A migration to a Cloud contact centre will likely trigger a re-evaluation of its importance in the organisation's broader strategy. Instead of a cost centre that drags on profitability or performance, the contact centre could be recognised for its full potential – a vector for innovation and an agent of change.

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