

## CommsDay Wholesale Congress – Dr Jo Dutton speech as part of the nbn

### Showcase

Thank you Brendan.

Hi everyone, my name is Jo Dutton and I am the Executive General Manager of Technology Transformation at **nbn**.

As a Government Business Enterprise, at **nbn** we strive to be open and transparent, so I'm going to be open and transparent with you about the types of IT applications we currently use.

We essentially have two categories of need: the first category is standard business processes where there is nothing unique or special about the way **nbn** operates.

These include applications which support functions such as HR, payroll, e-mail, video conferencing, etc., and for **nbn** also include standard telco processes such as fulfilment and managing network incidents.

For this category, our strategy is pretty simple, we partner with the major software providers (the Microsofts, ServiceNows, Nokia's of the world) – and we leverage, their predominantly cloud based and as a service platforms out of the box as much as possible.

We strive to avoid customisation, which ensures we have easy upgrade paths and can best exploit the Research and Development and evolution of those platforms that the partnering company brings

Our second category of need is focussed on how we support the more unique aspects of **nbn**, where an off the shelf solution simply doesn't suffice.

For **nbn** this is how we manage the data about our network and the onward use of that information to assure the network as well as supporting RSPs and our customers.

On average, close to 10 terabytes of data flows through our business on any given day.

The data sets range from network telemetry to customer experience data, and we recognise the enormous value they provide our industry.

It really can make the difference between a happy and an unhappy customer.

That's why we need to become brilliant at how we store, manage and interpret this data, and importantly we need to be also be brilliant at how best to share our insights - with field technicians and Retail Service Providers. And this sharing has to be as real time as we can make it.

Recently we launched our Corporate Plan where we profiled our systems transformation program, Enterprise Simplicity. This programme seeks to reduce IT complexity, providing for quicker time to market and improved RSP and employee experience as well as lowering costs.

This programme is well underway, we have already delivered 40% of our planned cost savings and more than 60% of our outdated systems have been decommissioned.

Two of the key areas of this programme are worth talking about a little more. One core pillar of the programme has been to improve our APIs so that it is easier to seamlessly integrate with **nbn**'s core processes and access our core products such as fibre connect.

Another key area is the streamlining of our data environments (when we started there were over 50!) - Creating a single strategic data environment provides a single source of truth to **nbn** and our partners, better enabling real time decision making and providing an AI ready data environment for the future. This will be essential when we look at the future of network which Sarah is going to discuss in the next segment.

Another area where we have used technology to support our customers is our Service Health Pulse program which has automated complex, but critical testing required from Retail Service Providers to correctly diagnose faults in the **nbn** network.

Service Health Pulse is aimed at taking the complexity away from RSPs and customers, and instead places it 'under the hood' of the Service Health Summary Portal and equivalent company to company interfaces.

This effort is saving our RSP assurance team around 53,000 hours of troubleshooting per year, and for HFC alone, reducing 14,000 repeat interactions. I'm sure we can all see the benefits to RSPs, customers and **nbn** alike from this focus, and we are confident we can continue to improve assurance quality.

The **nbn** network currently carries more than 80% of Australia's data and we recognise that when it comes to reliability, every second counts.

Another area where we have leveraged rapid innovation and agile delivery is in our launch of a field application called UNA.

Imagine you're a field technician crawling through someone's roof cavity, it's hot and cramped, and you need to check up on the details of the case.

Not a particularly great time to bring out your laptop. You need an answer right away.

By having **nbn** network data at their fingertips through the UNA smart phone app, field technicians can view the status of the **nbn** network in real time.

They're provided detailed insights on the nature of a fault and can now pinpoint its precise location.

As a result, field technicians are spending less time calling tier-two support for information and are more likely to resolve the fault immediately and first time.

Real-time testing capability is giving them the confidence that the fault has been fully resolved.

And by fixing it right the first time, we reduce the need for subsequent truck rolls.

So far, UNA has been hugely successful with our field technicians.

And that would make sense, given we developed the application in direct consultation with them creating a combined team of developers and field technicians who were able to collectively understand the complexity of the field

environment, what data they needed to solve it and have the expertise to develop the application as well.

Continuing the theme of transparency, it's no secret that as existing copper in the network degrades over time, these premises are likely to experience a higher fault rate.

The good news is that as we upgrade more of the network to full fibre and continue to resolve copper faults proactively, we are additionally confident of delivering an enhanced customer experience with even fewer faults into the future.

And this will be especially true as we continue to perfect our technology systems, our simplicity program and strategy has given us a great foundation to exploit the rapid advances in artificial intelligence and machine learning.

We are creating a future where we evolve from transactional interactions to proactivity. What do I mean by that?

Today a customer experiences a mysterious issue with their internet connection.

It's either the Wi-Fi connection or something to do with the **nbn** network.

They reach out to their Retail Service Provider and the RSP contacts us. We send out a truck to investigate and resolve the problem. The estimated resolution time is around 71.5 hours or approximately 3 days.

But imagine if we could use machine learning and AI to take our unstructured network and operational data to find patterns, predict and detect events,

customers are proactively notified there's an issue with the **nbn** network before they contact their RSP.

But let's go even further – we use AI to see degradation before the issue occurs, we proactively fix the degradation using virtual assistants, and supported by robotics the problem is resolved quickly and efficiently before the customer even notices.

Everyone, that is our destination. And it's closer than you think.

I hope you're all remaining for the final panel today where you will hear more on what we are already doing with AI and generative AI and how it will support everyday activities, such as helping technicians in the field and strengthening network resilience plans.

I'll now pass on to Sarah Humphreys who will show you a behind the scenes of what we're doing at **nbn** to evolve the network.

Thank you