The smart university: transformational concepts for institutions
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- Concept: The Smart City
- Case study: St John Ambulance WA
- Enabling New Things
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Delivering innovative solutions through our unique talent.
We understand the major workplace trends and challenges. *Businesses that can adapt and evolve quickly will lead the pack.*

<table>
<thead>
<tr>
<th>Mobility &amp; BYOD</th>
<th>Security</th>
<th>Cloud</th>
<th>Social networking</th>
<th>Pervasive video</th>
<th>Big data</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do I manage BYOD on my network?</td>
<td>Who is accessing what from where?</td>
<td>How do I get greater business agility through Cloud computing?</td>
<td>How do I derive business benefit from social networking?</td>
<td>What are the benefits and challenges of immersive collaboration and video?</td>
<td>What is my opportunity for turning big data into big decisions?</td>
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Challenge or Opportunity?

Drivers of Change (E&Y)

- Contestability of markets and funding
- Democratisation of knowledge and access
- Digital technologies
- Global mobility
- Integration with industry

Over the next 10-15 years, the current public university model in Australia will prove unviable in all but a few cases. – E&Y
The educational institution: today’s challenge

The NEC approach to the education ecosystem

<table>
<thead>
<tr>
<th>Business case for change:</th>
<th>Campus</th>
<th>Learning space</th>
<th>Administration</th>
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<tbody>
<tr>
<td><strong>Student experience</strong></td>
<td>Safety Security Identity</td>
<td>Knowledge Digital Mobility Access</td>
<td>Cloud Services Managed Services</td>
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<tr>
<td>• Safety and security</td>
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<tr>
<td>• Ease of use</td>
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<tr>
<td>• Higher learning outcomes</td>
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<tr>
<td><strong>Commercial</strong></td>
<td></td>
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<tr>
<td>• Increase revenue</td>
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<td>• Reduce cost</td>
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<tr>
<td>• Improve quality</td>
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<tr>
<td>• Change management</td>
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Concept 1:

NEC Smart City
Through more organic management of the layers of urban infrastructure, NEC seeks to realize a people-friendly information society that reduces environmental impact by effectively sharing data and efficiently allocating resources.
Concept 2: mobility
St John Ambulance WA is the primary provider of pre-hospital care services in Western Australia and plays a major role in the wellbeing of the community. A not for profit organisation their mission is to provide high quality ambulance and first aid services for the welfare of the Western Australian community with the best use of limited resources available.

**Business Issue:**

- Paper based system
  - Ambulance officers recorded all the details of the treatment and assessment for a patient on A3 Carbon paper.
  - Took several days to get back to head office for processing – and then the data was required manual data entry.
  - 5 to 10% of all forms went missing
  - Data quality issues by the time they got to head office it was too late to correct any data as the paramedics would have forgotten any details.
  - Missing forms also caused issues with being unable to invoice or make insurance claims.
Electronic system

- Real time capture of information
- Better data quality and validation
- Speeding up turnaround times for data processing (no manual entry needed)
- More data available for analysis and reporting

Custom development

- Allowed “value add” by including e-Learning and making the device a personal communications tool
- Better fit for the business than a commercial solution
- Tight integration with rosters and existing authentication systems has been achieved
- Cost almost identical to commercial solutions
Business outcomes

- Previous 14 day turn around time across $10s of millions of invoicing now real time
- Better data quality and validation
- More data available for analysis and reporting
- Reduced missing case sheets
- Audit and real time feedback capability
- 95% of all case sheets completed using iPads
- Staff satisfaction levels improved dramatically due to the relevancy of new working tools

More accurate and efficient.
There are a range of challenges that arose during the project.

<table>
<thead>
<tr>
<th>Data</th>
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<tbody>
<tr>
<td>Keeping patient data confidential</td>
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<tr>
<td>Auto-logout at end of shift</td>
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<tr>
<td>All data on devices is encrypted</td>
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<td>Excessive data use</td>
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<table>
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<tr>
<th>Connectivity</th>
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<tr>
<td>iPads will connect “through” the ambulance WiFi allowing us to manage what is accessed</td>
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<td>WiFi hot spot in each Ambulance</td>
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<tr>
<td>WiFi at the Depots</td>
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<tr>
<td>Team Leaders have 3G-enabled iPads to enable their varied roles</td>
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<td>Web services connectivity over WiFi / 3G</td>
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<table>
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<tr>
<th>Security</th>
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<tr>
<td>iPad sandboxing and certificate signing for data protection</td>
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<td>Shift-based log out system with background processing</td>
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<tr>
<td>Secure SSL Communications to the back end web services</td>
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<tr>
<td>Controlling which “apps” staff can install</td>
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<tr>
<td>“Airwatch” alerts us when undesirable “apps” have been installed</td>
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What Are We Trying to Achieve?

How can IT help the University to transform?
Institutional Flexibility

Figure 8: Potential future model – 'Streamlined Status Quo'

Legend:
- Current area of focus
- Area de-scoped or reduced in focus in future models
- Increased area of focus in future models

Source: Ernst & Young
How Do We Transform – No Shortage of Theories
The NEC Australia Difference
Our vision. Your success.

Sharing our vision is key to helping customers understand how partnering with NEC Australia will deliver efficient, innovative and profitable outcomes for their business.

NEC’s vision is to deliver innovative, tailored technology solutions through our unique and diverse talent, industry partnerships and relationships with our customers.

NEC helps deliver measurable returns on your technology investments.
Partnerships are key

*NEC partners with the world’s leading solutions and services companies to deliver and support the best solutions for your business.*

Key partners include:

- Cisco Gold Partner
- Microsoft Partner
- Genesys
- Zeacom
- Polycom
- Oracle Platinum Partner

*We partner with the best to bring you the best.*
Largest national reach

**NEC Australia** has the largest national delivery, support and services footprint including local NOCs and an extensive partner network.

- Tier one technology company with 1500+ employees
- 200+ channel partners extending NEC’s nationwide sales and support network
- Technology centre in Melbourne focussed on design, development and delivery
- NOCs (Network Operation Centres) in Melbourne and Sydney
- Trans-Tasman capabilities
- Established in Australia in 1969
We help our customers with their business challenges

We help our Government and enterprise customers make the best choices as they seek to transform their businesses and gain greater value from their technology investments.

How we help our customers

- Dedicated professionals who do what it takes to deliver success in a consultative manner
- Partnerships with leading technology companies
- Reliability, ability to deliver and national footprint
- Access to local and international expertise
- Value creating innovation
- A full range of technology services that span consulting, application and infrastructure solutions

Successful solutions through unique talent, partnerships and customer relationships.
The NEC Australia innovation factor

*The ability to innovate and create is in our DNA – it’s just how we do things.*

<table>
<thead>
<tr>
<th>A leader in wireless</th>
<th>Mobile voice and data</th>
<th>A leader in local R&amp;D</th>
<th>Health-care technology</th>
<th>Supporting communities</th>
<th>Emergency services</th>
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</thead>
<tbody>
<tr>
<td>We participate internationally in setting the standards for devices and hold over 90 wireless technologies patents.</td>
<td>We developed the Mobile Access Controller (MAC) – an award-winning, smart mobile voice and data platform for field workers.</td>
<td>We have invested more than $200 million in local technology development since the year 2000.</td>
<td>We designed an award-winning tablet based solution for St John’s Ambulance (WA) for transmitting real-time patient information.</td>
<td>We are the largest ICT services company in the Northern Territory and provide support to many remote communities.</td>
<td>We maintain and support the multi-vendor voice and data systems for Australia’s largest police force.</td>
</tr>
</tbody>
</table>
Our customers include…
We look forward to demonstrating how NEC can help you achieve greater business value from your technology investment.

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