#### Exploring NBN Security & Privacy Issues

Malcolm Crompton, Managing Director Information Integrity Solutions Pty Ltd





# Privacy and the Pipe – really an issue?

- What will NBN deliver?
  - Richer applications to end users
  - The Cloud ...

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- Privacy: not an issue or a corner stone?
  - "For example, privacy concerns are an obstacle to the collection & use of online health records." ....

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#### **NBN services – richer applications?**

- End users' evolving needs
- Wholesale services to meet end-user needs
- Video services over the NBN
- Enabling future e-government capabilities

Chapter 3, National Broadband Network Implementation Study, May 2010

www.dbcde.gov.au/broadband/national\_broadband\_network/national\_broadband\_network\_implementation\_study

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#### Don't forget the Cloud

- Smart Infrastructure
- e-Health, e-Education, e-Everything else ..
- Services
  - Microsoft Azure
  - Sales Force
  - Amazon
  - Google
  - Etc ...

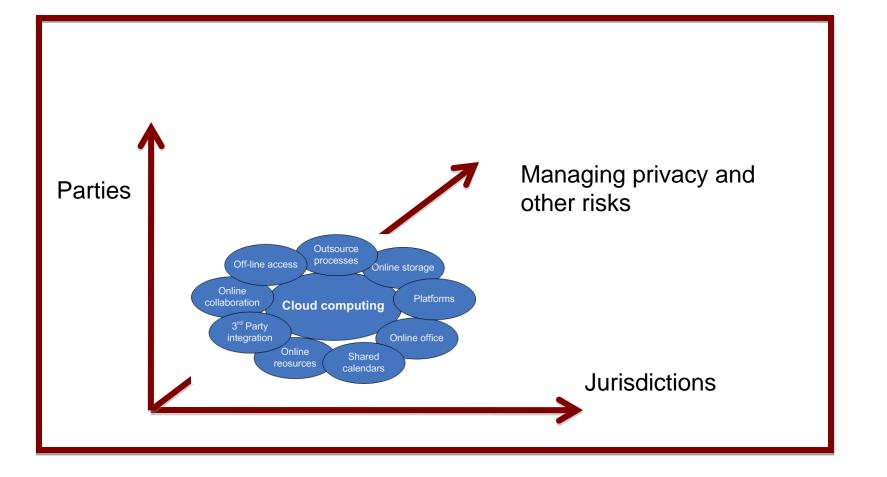


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#### **Cloud – a complex environment**





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# Case Study 1 – HealthVault

- Australia struggles with EHR
  - 10 year process and counting
  - trust, security, control not yet satisfying consumers
  - EHR or HIX?

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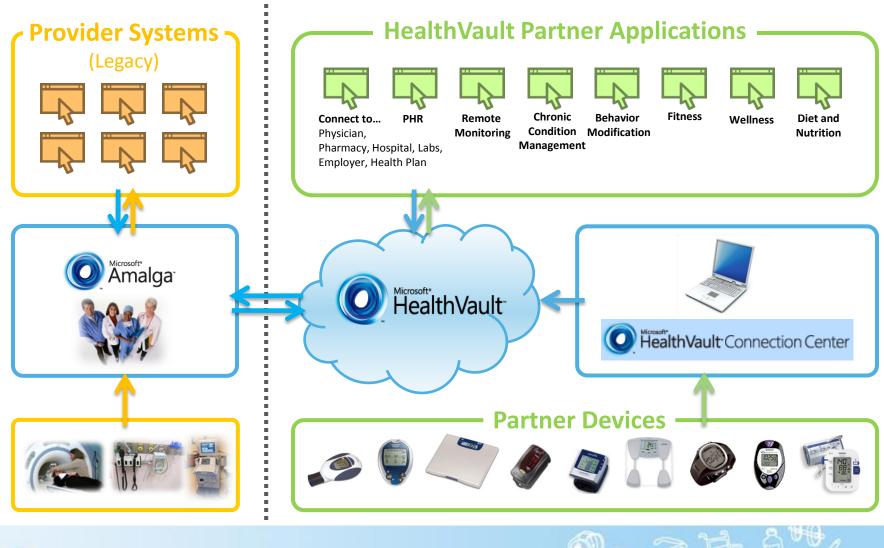
- Microsoft <u>HealthVault</u> one response
  - Fragmentation of health information
  - Multiple players, systems, standard
  - Individual health vault, enhanced privacy, individual controls access



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#### Case Study 1 – HealthVault





## Case Study 2 – Smart Infrastructure

 HoR Standing Committee on Infrastructure, Transport, Regional Development & Local Government Inquiry into Smart Infrastructure

www.aph.gov.au/house/committee/itrdlg/smartinfrastructur e/tor.htm

– "During the course of its inquiry, the Committee should note any privacy, safety, health environmental and other issues relating to smart infrastructure...."



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#### Case Study 2 – Smart Infrastructure

 "Smart infrastructure and privacy": speech by Privacy Commissioner to HoR Inquiry

www.privacy.gov.au/materials/types/speeches?sortby=60

- "Smart infrastructure clearly offers many benefits ... Done badly, smart infrastructure has the potential to impinge on individual privacy & risks undermining community confidence in smart systems as a whole."
- Unanswered question: who's it for?



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#### "Privacy": what's it all about?

- Control
- "Creepiness factor"
- "What happens when it all goes wrong??"

# IT'S ALL ABOUT TRUST



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## **NBN** – Impact on privacy

Richer services (video, 3DTV, gaming)

- US experience (eg behavioural targeting)
- privacy challenges don't need to wait for NBN
- Enhanced services; Cloud
  - Greater potential privacy impact
  - Will Privacy be enabler or roadblock ?

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# Privacy Act – isn't this enough?

- Compliance necessary but not sufficient to get take up
- Why?
  - Law doesn't always work well (notice, consent)
  - The Cloud:

Trans border + Complex Supply Chains = Who is accountable for what?

– "The Great Risk Shift"





# **Global insights available**

- <u>Australian Govt. changes to Privacy Act</u> following <u>ALRC Report</u>
- <u>US Department of Commerce</u> & <u>US</u>
   <u>Federal Trade Commission (FTC)</u> asking,
   "is there a better way?"
- EU <u>Commissioner Reding</u> inauguration
- Peter Hustinx (EDPS): Opinion on "Promoting Trust in the Information Society by Fostering Data Protection & Privacy"



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#### Way forward:





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