





# The digital age provides opportunities for our community to benefit from easier access to more efficient services, better connectivity and more accountability.

The acceleration of digital technologies continues to change the way we live, the choices we make, the connections we make and the opportunities we have. New technologies will help us maintain our environment and strong economy while supporting creativity and innovation and servicing our community.

The early arrival of high speed broadband in Darwin is already providing scope for businesses and residents to explore a wide range of opportunities.

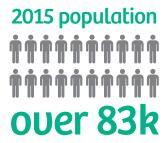
This strategy looks at how we can make best use of digital technologies to provide our community with consistent and sustainable benefits now and well into the future. Whilst we cannot accurately forecast what 'digital' will mean for local government 10 or even 5 years from now, what we can do is embrace change and leverage technology for the benefit of all.

This strategy provides a framework for how we will approach the challenges and opportunities ahead. It outlines a balanced approach to ensuring the needs of our community are met, accountability goals are achieved and we enable the digital economy to be leveraged for Darwin based businesses and community organisations.

I embrace the challenges and opportunities the digital age brings, and I look forward to working closely with the community in creating a place of opportunity and choice for the people of Darwin.

Katrina Fong Lim LORD MAYOR

## A Snapshot of Darwin



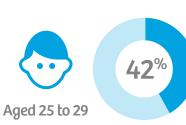
Darwin area covers

112km<sup>2</sup>

is over a third of entire Northern Territory population Greater Darwin region represents

**57%** of the NT population

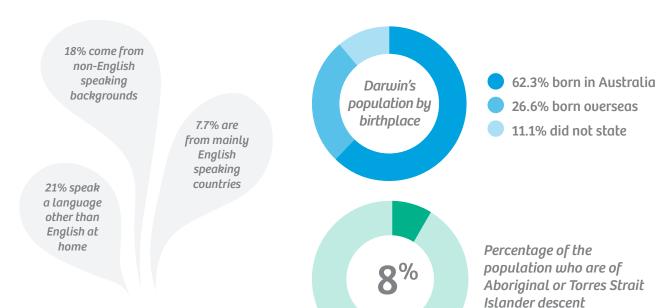
Age of Darwin's residential population





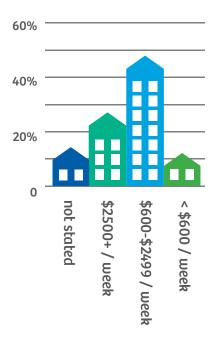


## A culturally diverse city



## A Snapshot of Darwin

## Household Income: 27% of Darwin households are high-income



Places to get active and play - Council maintains:

17



Ovals

10



Outdoor exercise stations

8



Tennis courts

4



Libraries

4



Public basketball facilities

3



Public swimming pools

3



Community Centres

1



Skate park



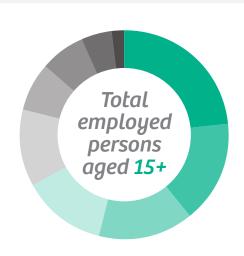
A place to move:

442km Footpaths

**72km**Council shared paths



A green place 657ha of green space



Employment: 24% of people employed in Darwin are professionals with another 16% being office and administration workers.

- 23.5% Professionals
- 15.8% Clerical and Administrative Workers
- 14.7% Technicians and Trades Workers
- 13.0% Managers
- 11.9% Community and Personal Service Workers
- 7.5% Sales Workers
- 7.2% Labourers
- 4.7% Machinery Operators and Drivers
- 1.7% Other



Our Digital Strategy is simply a framework that will govern the way we explore, review and adopt technology to help deliver on our strategic vision for the City of Darwin.

It does not seek to replace the long-term vision for Darwin, or the five core elements of our plan to 2020, but rather will define the ways we leverage digital opportunities to support them.

The strategy details specific digital goals for the city, defines what success looks like, and will guide delivery of technology-related projects and activities over the next 5 years to 2020.

And, critically, this must be an evolutionary document. The change that has occurred in the last 5 years may continue at an even faster pace, so accepting change and adapting to it is one of the underlying principles of this body of work.

Development of this strategy involved a review of current trends in the use of digital technologies in government here and overseas, and leverages and references a number of Local, Territory, Federal, and international publications in the interests of alignment with already documented strategies for Darwin, and benchmarking best-practice around the world.



The proliferation of the internet, smartphones, social media, information sharing, ecommerce and the roll-out of the NBN has made 'digital' a real opportunity for government, and not just in the way we communicate.

It has enabled entirely new channels for service delivery, business process improvement, community consultation, innovation and economic development – and as such needs a framework and guiding principles to ensure that adoption and implementation of new technology is both considered and measured with specific endgoals at front of mind. It is also critical to ensure (other than for the benefits gained through experimentation, innovation and immersion in new ways of working) that technology is not something that is pursued for its own sake. It needs to help deliver on what we are already trying to achieve, not distract from it. A truly smart city is one that makes the most of the tools available, and our Digital Strategy will govern the way we use those tools, so that the reason we're using them is not lost from view.

With Darwin's economic growth, primary resources, tourism strength and proximity to the world's largest emerging markets, Darwin is already a global city. Global best-practice in the use of technology is one of the keys to a sustainable competitive advantage and to simply making our city a better place to live, invest, work and play.



outcomes. Where possible we have also listed a number of projects that are either under way, have been proposed, or that have been recommended for discussion. Our three pillars are:



## Open and Innovative Governance

An internal look at how the adoption of technology might improve our own business processes, the way we deliver services, and reduce the cost of compliance.



## A Connected Community

Strategies to improve the way we engage with our stakeholders, facilitate partnerships with community groups, and provide digital services to improve quality of life in Darwin.



## The Digital **Economy**

Strategies that focus on outcomes for private enterprise in Darwin, fostering innovation and creativity, and driving commercial growth for businesses investing and operating in our city.





# Guiding Principles

#### 1. We will use technology to improve transparency.

Information on local government projects, procurement processes and expenditure will be more readily accessible by the public, and will lead to greater trust in our processes and better decision making through consultation and accountability.

# 2. We will use new technology to improve service delivery internally and externally.

In line with national digital transformation service standards, we will migrate the services we can onto digital channels to improve accessibility and efficiency, provided it does not disadvantage those most in need of them.

# 3. We will innovate and use technology to drive efficiencies and empower our people.

We will use digital tools to share knowledge and remove information silos in our organisation, resulting in collaborative decision making, faster access to regulatory and policy content, improved customer service, a reduction in the cost of compliance and more autonomous front-line staff.

# 4. We will adopt technology that supports a more flexible workforce.

Become an employer of choice by providing cloud and mobility solutions to our people that more effectively deliver a flexible working environment.

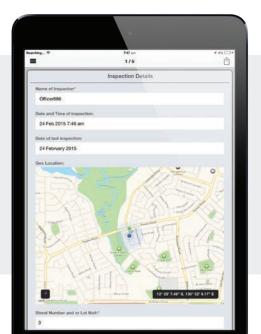
# 5. We will deliver self-service channels to make it faster for members of the community to get what they want, when they want it.

Far from being a dehumanising process, well-executed self-help channels increase customer satisfaction and standardise access to services and information.

# Open and Innovative Governance

## Strategies and Key Projects

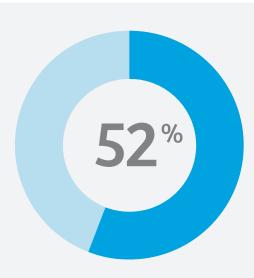
Strategies and key projects	What we are doing	What ideas we have
Use technology to improve transparency	<ul><li> Click and Fix CRM Mobile Application</li><li> Webstreaming of Council Meetings</li><li> Publishing Council decision and policies online</li></ul>	<ul><li>Open data (see Digital Economy)</li><li>Investigate interactive consultation tools</li><li>Interactive major projects directory</li></ul>
Use new technology to improve service delivery internal and externally	<ul> <li>Improvements to publishing process for councils meeting agendas and reports</li> <li>Implementation of onlines forms and registers</li> <li>Click and Fix CRM allows for more efficient communication between staff and customer</li> <li>Digital forms for staff inspections</li> <li>Data centre duplication project, dedicated disaster response system, Independent power generation systems to ensure council is able to deliver services even during disaster events</li> </ul>	<ul> <li>Rapid publishing of agendas, reports and associated documents to the public.</li> <li>Further conversion of forms/applications to online</li> <li>Tighter integration between internal CRM and Click and Fix CRM</li> <li>Enhance internal document management system functionality</li> <li>Increase integration of council disaster response systems with NT Agency systems</li> </ul>
Use innovative technology to drive efficiencies and empower staff	<ul> <li>Remote Access to Council data and systems</li> <li>Implementation of new asset management system</li> </ul>	<ul><li>Yammer knowledge sharing</li><li>Innovation Technology fund</li></ul>
Use technology to assist with more flexible workforce	<ul><li>Remote access to council system</li><li>Wi-Fi in council buildings</li></ul>	<ul> <li>Wider Wifi connectivity in Public and open spaces</li> <li>Internal recognition and reward system</li> <li>Open creativity and common technology office space</li> </ul>
Improve self-service access to Council services	<ul><li>Darwin Click and Fix mobile issues reporting tool</li><li>Online payments</li><li>New payment options</li></ul>	<ul> <li>Live-chat &amp; digital/social customer service channels</li> <li>Interactive knowledge base (online Q and A system)</li> </ul>



## Case Study – Tree Safety App

The City of Darwin has adopted a digital approach to tree risk assessment. The processes recommended by International Society for Arboriculture have been converted into an ipad application that allows council arborists to take advantage of pre-populated species lists, automatic risk calculations and gps located data. The app also allows the arborist to include photos of the tree and any hazardous features with their assessment. As soon as the risk assessment is completed by the arborist on site, the recommendations are sent to office staff for further action.

## Frequency of Internet use in Australia



more than 5 times a day

1-4 times a day

Most days

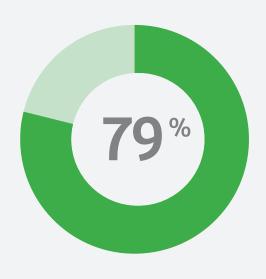
A few times a week



About once a week

Less often than weekly

Never

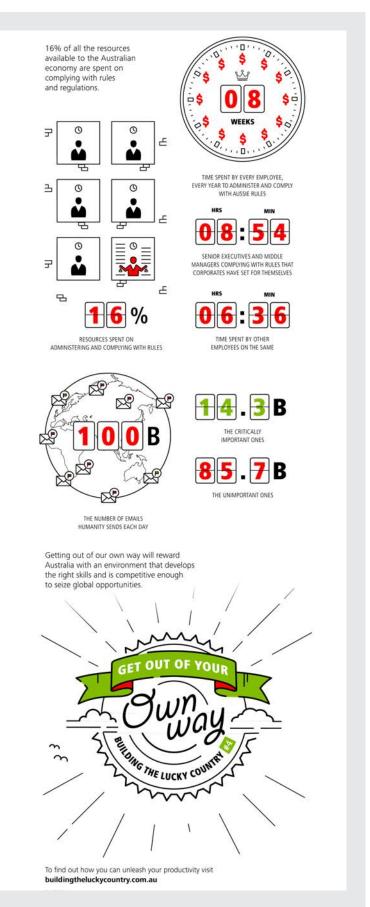


access the internet daily





Compliance costs
Australian businesses
\$250 billion every year.







With better utilisation of available technology, the City of Darwin will be able to improve communication with constituents and stakeholders, drive community consultation efforts, improve co-operation between community groups and foster creativity and innovation within the city limits.

Using social media tools will encourage open dialogue with our audiences and offer an alternative customer support channel, and by training Elected members and key executives on the best practice use of social media we will be able to better connect our community with the human side of our organisation.

## **Guiding Principles**

1. We will utilise digital media and social channels to drive community engagement and more effective, efficient communication with the people of Darwin.

Traditional communication channels are slow and often less effective than digital channels. There is sometimes no substitute for 'facetime' with our community, but when we need feedback or want to foster healthy two-way debate and discussion about key issues, digital channels are the most effective and transparent options available to us.



### Case Study - Darwin Click and Fix App

This mobile app initiative provides a great example of empowering our customers, residents and visitors to take ownership of their city. The app enables members of the public to report graffiti, tree problems, road hazards, or other issues while on the go. The app uses GPS to identify the location and allows users to add a photo to service request, helping Council to assist with the issue in a timely manner.



# 2. We will live up to the community's needs and expectations in relation to Digital Services.

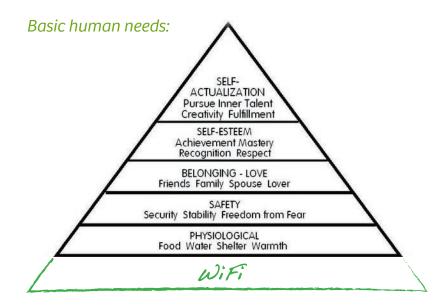
People are growing up surrounded by digital and have come to expect as a minimum standard things that were considered impossible only a few years ago. The nature of technology means this principle will forever be tied to a moving goalpost, but we will look to global best-practice to shape how we deliver on the community's expectations.

### 3. We will work hard to bridge the 'digital divide'.

The digital divide refers to economic and social inequality in their access to information and communication technologies. Only 57% of households with an income of less than \$40,000 have internet access at home (Australian Bureau of Statistics) compared with an average 82% of the people in Darwin. This satirical modification to Maslow's Hierarchy of Needs (below) actually points to a broader and much more serious movement to declare Internet access a basic human need, such is the socio-economic disparity between those who have it, and those who don't. This divide is something we need to be incredibly vigilant about given the multicultural population we support and the indigenous Australians that live in, work in and visit our city.

# 4. We will use technology to improve community partnerships.

Whether it is helping manage grants programs to Not For Profit organisations, fostering creativity and innovation in our arts community, delivering managing and measuring better services to those in need, or working with training organisations to help deliver their programs to our stakeholders.



# Strategies and Key Projects

Strategies and key projects	What we are doing	What ideas we have
Social and digital media to drive engagement and communication with community	<ul> <li>Active social media accounts</li> <li>Darwin Click and Fix reporting and communication platform</li> </ul>	<ul> <li>Develop targeted social media strategy and integrate into marketing campaigns</li> <li>Website overhaul to improve interactivity and mobile accessibility</li> <li>Investigate interactive consultation tools</li> <li>Expand Click and Fix functionality and use internally</li> </ul>
Align community needs and expectations to Digital Services	<ul> <li>Public Wi-Fi available in all libraries and Smith St Mall</li> <li>Online payment system for rates, infringements, animal registrations.</li> <li>Pay for parking by phone/app/credit card instead of cash</li> </ul>	<ul> <li>Expand Wi-Fi coverage in public places particularly CBD</li> <li>Work with other agencies to ensure coverage areas are maximised (Ubiquitous Wi-Fi)</li> <li>Mobile friendly website and payment systems</li> </ul>
Bridge the "digital divide"	<ul><li>Library public computer facilities</li><li>Technology training sessions</li></ul>	<ul> <li>Wider connectivity options in Council spaces</li> </ul>
Use technology to improve community partnerships	<ul> <li>Technology training and knowledge sharing with Community groups and Sister cities</li> </ul>	<ul> <li>Grants/scholarships targeting innovative digital projects</li> <li>Use digital channels to better engage with the community</li> </ul>

## Home Internet Access

#### **AUSTRALIA**







Major Australian Cities



**79**%

Remote Australia

#### **NORTHERN TERRITORY**





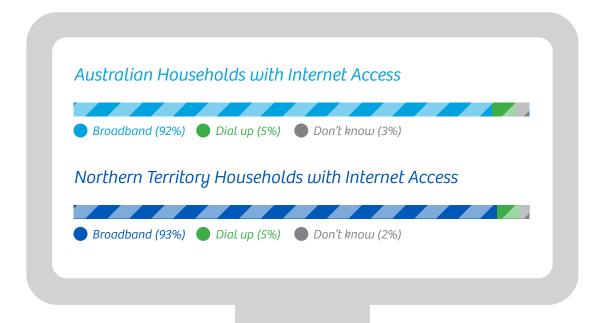


Darwin

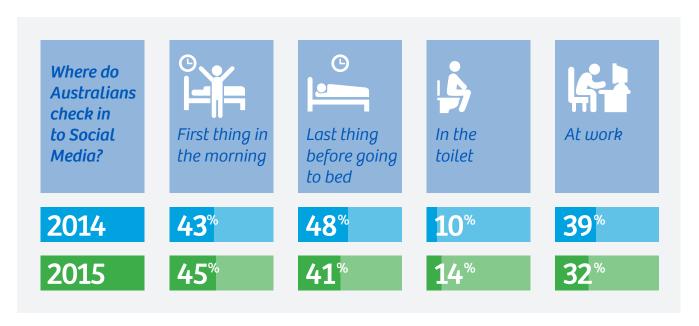


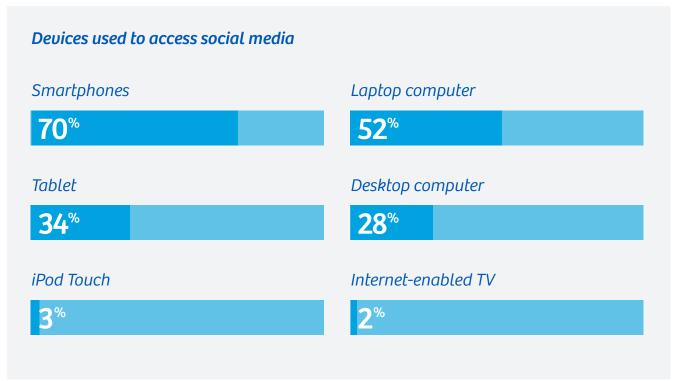


The Rest of the Territory



## Australian Social Media Usage

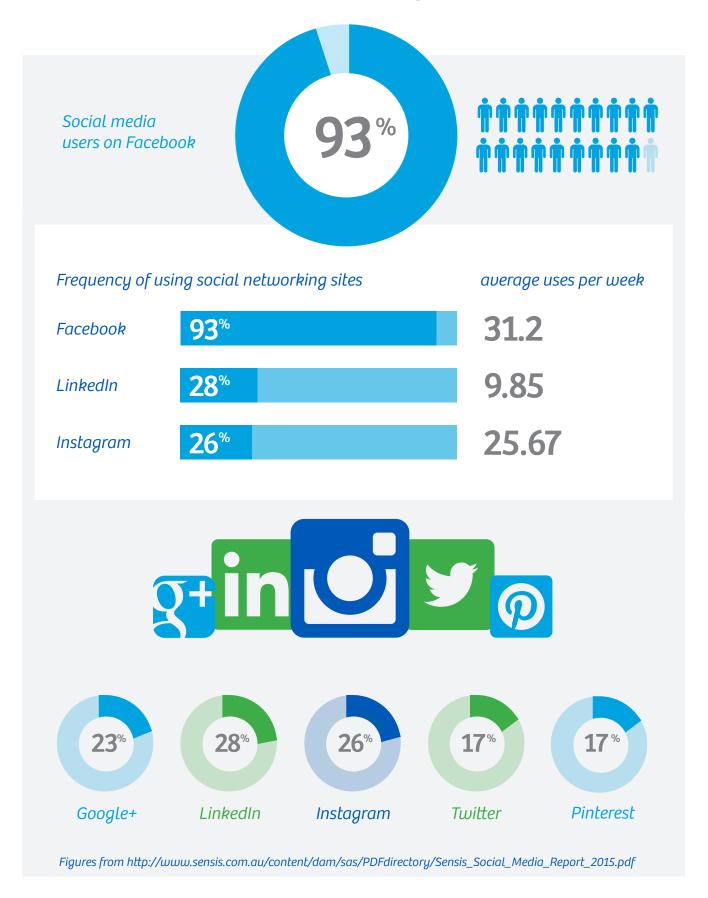




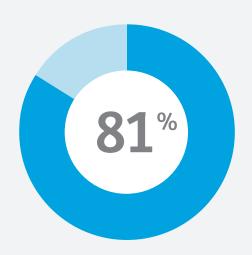
Figures from Sensis Social Media Report, May 2015 (Yellow Pages and Sensis)

https://www.sensis.com.au/content/dam/sas/PDFdirectory/Sensis\_Social\_Media\_Report\_2015.pdf

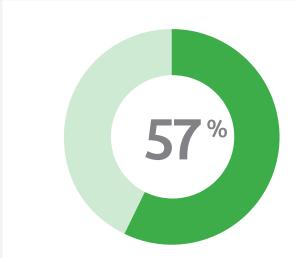
## Australian Social Media Usage



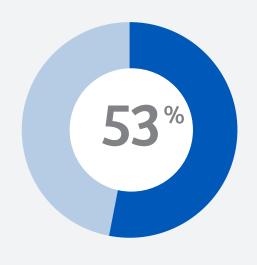




Smartphone ownership



of Australians consider it their "go to device"



of Australians own a tablet, laptop, and smartphone

Deloitte: Australia media usage and preferences 2014.

http://frontieradvertising.com.au/homepage/deloitte-australia-media-usage-preferences-2014/





The digital economy is all about driving direct and indirect commercial benefit for the business community in Darwin.

It might be through improving efficiencies in our own operations and procurement processes, cutting compliance and streamlining the way business engages with Council, and directly influencing the way our business community utilizes digital channels to improve profitability in their own organization. In 2013, there were 14,313 businesses in the Northern Territory (Department of Business, NT) and anecdotally we know the majority of them are online in one form or another.

Our role can be that of a facilitator – providing access to training, infrastructure, open data and council services that help Darwin businesses achieve sustainable commercial success.

## **Guiding Principles**

1. We will better utilise technology in assisting the growth of the Council's own digital economy.

This means streamlining the way businesses do business with Council, more transparent and efficient procurement processes, more public/private partnerships and better access to Council services that support private enterprise.

# The Digital Economy



# 2. We will help local businesses to take advantage of new technologies to encourage empowerment, opportunities and drive innovation.

As a facilitator we can provide access to training, share best-practice knowledge on trends in digital marketing and business enablement, and support businesses in the digital services ecosystem with introductions and opportunities for growth. We can also foster creativity and innovation through access to collaborative 'co-working' spaces, grants, supporting the cause of Open Data (see below) and profiling business, technologies and solutions through our media partnerships and our own digital channels.

# 3. We will actively foster business engagement and relationships with Council using social and digital communications channels.

We need to walk our talk to help the City of Darwin to better communicate with business using social and digital tools, and drive direct relationships between our key people and processes and those who can make a difference to our city through investment, employment, and product or service delivery.

### 4. We will champion the concept of Open Data.

We will make anonymised information available, in raw form or via APIs, that will assist in the development of innovative applications for public and private benefit, and will nurture a broader range of public-private partnerships by tapping into talent outside our organization for the benefit of the city.



## Case Study – GIS Cloud Portal

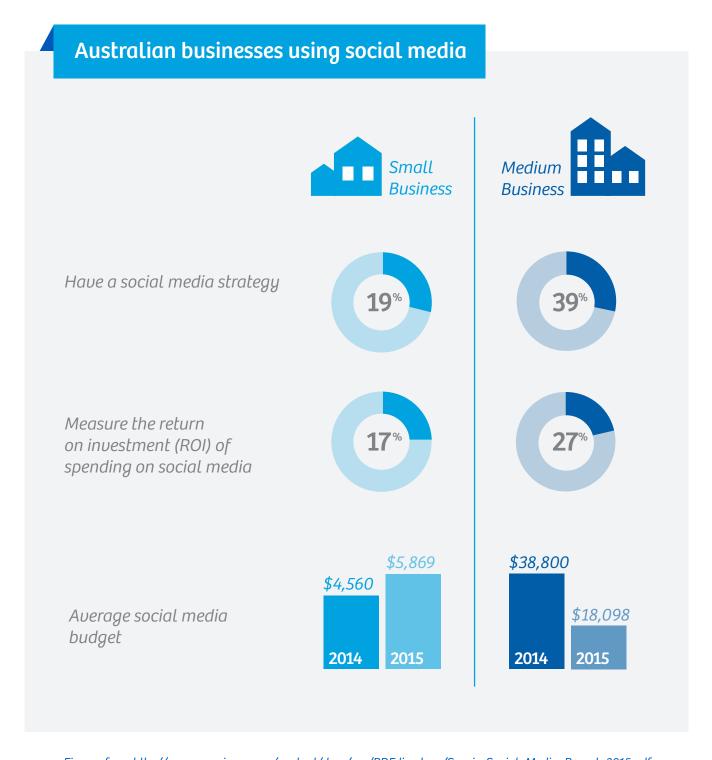
The councils GIS Cloud portal allows the public and businesses to view, query and download councils spatial data. Information is available for a diverse range of council facilities such as the location and contact details of childcare centres down to the diameter and length of underground stormwater drains. The portal also has the facility for businesses and other external parties to download layers of data for use within their own software systems.

# The Digital Economy

# Strategies and Key Projects

Strategies and key projects	What we are doing	What ideas we have
Use technology to assist the growth of the Council's Digital Economy (the business council does with private enterprise)	<ul> <li>Online Tendering system</li> <li>Wider wifi connectivity to attact customers to retail and market spaces</li> </ul>	<ul> <li>Digital media planning</li> <li>Investigate interactive consultation tools</li> <li>Open data</li> <li>Online based procurement or quoting system</li> <li>GovHack, encourage startups, drive innovation, foster public/private partnerships</li> </ul>
Empower local businesses using technology	<ul> <li>Spatial data on council services and assets is available to view/interrogate online</li> <li>Increased payment options including Credit cards for carparking</li> </ul>	<ul> <li>Grants/scholarships targeting innovative projects</li> <li>Fund innovative ideas that solve social problems</li> <li>Increase the use of sensors and intelligent systems</li> </ul>
Improve business engagement and relationships with social/digital communications	<ul> <li>Promotions of city wide events using Council's social media channels.</li> </ul>	<ul> <li>Investigate interactive consultation tools</li> <li>Elected member training in social media &amp; organisational policy development</li> <li>Content Marketing Strategy</li> </ul>
Use Open Data principles to encourage private sector innovation with Council data	Working with local businesses to create virtual tours of council facilities	<ul> <li>Allow spatial and non-spatial data to be accessed real time via API or similar</li> <li>Support initiative such as GovHackNT</li> </ul>

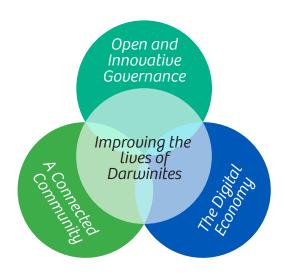
# The Digital Economy



 $Figures\ from\ http://www.sensis.com.au/content/dam/sas/PDF directory/Sensis\_Social\_Media\_Report\_2015.pdf$ 

# Global Best Practice, Local Sensibilities

This document was prepared having considered a number of complementary publications and standards for the use of 'digital' in government.



Benchmarking global best practice, but considering it in the context of the unique nature of our city, was a fundamental part of the preparation of this document. Equally fundamental will be alignment with the strategic goals articulated in the City of Darwin's 'Evolving Darwin Towards 2020 Strategic Plan'. These strategies are:

- 1. A Collaborative, Inclusive and Connected Community
- 2. A Vibrant and Flexible Tropical Lifestyle
- 3. An Environmentally Sustainable City
- 4. An Historic and Culturally Rich City
- 5. Effective and Responsible Governance

As with private enterprise, the success of any communications strategy, or digital strategy, relies on its alignment with the overarching organisational strategy. And just as a collaborative relationship with the all levels of Government is an everyday part of life for the City of Darwin, collaboration on our digital strategy including adopting a standardised approach where possible - will smooth implementation and help ensure long-term efficiencies throughout the process.

### Other publications that have contributed to the preparation of this document include:

#### **OASIS**

Organisation for the Advancement of Structured Information Standards

www.oasis-open.org

#### **Smart London**

- www.london.gov.uk/priorities/business-economy/vision-and-strategy/smart-london
- www.london.gov.uk/sites/default/files/smart\_london\_plan.pdf

### City of Vancouver Digital Strategy

- www.vancouver.ca/your-government/digital-strategy.aspx
- www.vancouver.ca/files/cov/City\_of\_Vancouver\_Digital\_Strategy.pdf

#### **Adelaide City Council Digital Strategy**

- www.adelaidecitycouncil.com/assets/Policies-Papers/docs/STRATEGY-digital-strategy-connect-adelaide-2012-16.pdf
- SA Department of State Development Digital Technology
- www.statedevelopment.sa.gov.au/what-we-do/digital-technology
- SA Department of the Premier and Cabinet SA Connected
- dpc.sa.gov.au/sites/default/files/pubimages/documents/ocio/SA%20Connected%20ICT%20Strategy.pdf

#### The Australian Online Landscape Review for the month of August 2013, by Nielsen.

www.nielsen.com/content/dam/corporate/au/en/reports/2013/Nielsen-Australian-Online-Landscape-Review-August-2013.pdf

#### The Australian Online Consumer Landscape. March 2012, by Nielsen.

workspace.unpan.org/sites/internet/documents/S6AU12%20The%20Australian%20Online%20Consumer%20Landscape.pdf

## Household Use of Information Technology, Australia, 2010-11 by the Australian Bureau of Statistics.

www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8146.02010-11?OpenDocument

## The Industry's Annual Thought Leading Report of Today and Tomorrow's Digital Consumer, by Nielsen.

www.nielsen.com/content/dam/corporate/au/en/reports/2013/australian-connected-consumers-flyer-march-2013.pdf

## Business Use of Information Technology, 2011-12, by the Australian Bureau of Statistics.

www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/17515D80D0A58BEDCA257BCE001231EF?opendocument

## The Connected Continent. How the internet is transforming the Australian economy" by Deloitte.

www.deloitteaccesseconomics.com.au/uploads/File/DAE\_Google%20Report\_FINAL\_V3.pdf

## Communications Report 2011-2012, by the Australian Communications and Media Authority.

www.acma.gov.au/webwr/\_assets/main/lib550049/comms\_report\_2011-12.pdf

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## The New Multi-screen World, by Gogle, Sterling Brands and Ipsos

ssl.gstatic.com/think/docs/the-new-multi-screen-world-study\_research-studies.pdf

### Our Mobile Planet: Australia, by Google and Ipsos

services.google.com/fh/files/misc/omp-2013-au-en.pdf

## Report 3 – Smart phones and tablets take-up and use in Australia by the Australian Communications and Media Authority

www.acma.gov.au/webwr/ assets/main/lib310665/report-3-smartphones-tablets-comms report 11-12 series.pdf



