

GoDigitalQld

Queensland Digital Economy Strategy and Action Plan



GoDigitalQld Queensland Digital Economy Strategy and Action Plan © State of Queensland (Department of Science, Information Technology, Innovation and the Arts) 2014

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Minister's message

The Queensland Government is determined to embrace the digital economy to realise its full potential. The *GoDigitalQld Queensland Digital Economy Strategy and Action Plan* is our roadmap to using digital technologies, content and innovative services to boost productivity and connectivity in Queensland.

The GoDigitalQld Queensland Digital Economy
Strategy and Action Plan sets clear strategic
objectives to put us on the path to realise our
vision for Queensland to be Australia's most
digitally interactive state and to be recognised
globally as a digital innovation hub. It complements
The Queensland Plan vision to capture future
opportunities through innovation including the
uptake of digital technologies and skills.

The GoDigitalQld Queensland Digital Economy
Strategy and Action Plan focuses on those areas
within the control of state government. To this
end, the GoDigitalQld Queensland Digital Economy
Strategy and Action Plan sets out a three-year plan
of action and transformation to contribute towards:

- providing the best public service in Australia and deliver citizen-centric services to Queenslanders
- ensuring Queensland has the infrastructure that best connects people to jobs and changing lifestyles, businesses to markets and visitors to our exceptional destinations
- providing the best business environment in the nation to start or grow a business
- ensuring Queensland utilises and grows its digital industry effectively to the benefit of the government sector, our four pillars and across the economy.

We have listened to what Queenslanders had to say. We will provide greater personalisation of services and better user experiences for Queenslanders interacting with government. We will continue to progressively open up the vast amount and types of data and records that departments hold to benefit Queenslanders, businesses and researchers.

The strategy and action plan also contains realistic actions which seek to address the core digital needs of rural and remote Queensland communities and help disadvantaged Queenslanders to effectively participate in, and enjoy, the benefits of the digital age.

Actions will also ensure we reduce administrative and regulatory barriers to provide Queensland businesses and industry, particularly small to medium businesses, with the best conditions to compete in an increasingly global, digital marketplace.

We will continue to engage and partner across all levels of government and the non-government sector for the benefit of all Queenslanders. We will also continue to listen to and learn from Queensland's communities, businesses, industries and tertiary sector in the implementation of the GoDigitalQld Queensland Digital Economy Strategy and Action Plan.

The Honourable Ian Walker MP

Minister for Science, Information Technology, Innovation and the Arts

What is the 'digital economy'?

Governments, businesses and communities around the world are increasingly embracing digital technologies* and the growing range of digital content and services they enable to advance their economies and societies.

The Australian Government defines the digital economy as:

'The global network of economic and social activities that are enabled by information and communications technologies, such as the internet, mobile and sensor networks.'**

A simpler way of looking at the digital economy is that it is the marketplace on the internet.

The digital world is an integral part of Queensland's economy, not separate from it. Digital technologies and services are increasingly global, with both production and consumption growing exponentially world-wide. Queensland needs to embrace this global trend, effectively a new industrial revolution, in order to advance our economy, create new jobs, attract investment, build our prosperity and improve the lives and lifestyles of Queenslanders regardless of location.

Fast facts:



14.24 million Australians had access to the internet in their home at June 2013



13.15 million Australians had a home broadband service at June 2013



5.64 million Australians (digital workers) used the internet to work away from the office



12.86 million Australians used online banking or bill paying in the six months to May 2013

Source: Australian Communications and Media Authority (ACMA) (2013) www.acma.gov.au/theACMA/engage-blogs/engage-blogs/researchacma/Digital-economy-grows-strongly



2.5 billion people are connected to the internet today —a third of the world's population



4 billion people are projected to be internet users by 2020 —more than half the global population

Source: The Boston Consulting Group (2014) www.bcgperspectives.com/content/articles/digital_economy_telecommunications_delivering_digital_infrastructure/

^{*} Digital technologies include the internet, hardware and software applications, devices such as smart phones and tablets, wireless and satellite, electronics and sensors, transaction and trading platforms, digital media and content

^{**} Australian Government, Department of Communications (2013), Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.

Queensland's digital economy

Queensland is a highly decentralised and sparsely populated state. Distance challenges our society and economy, making it hard for us to stay connected with each other, costly for many organisations to deliver services, and challenging for us to connect with people and markets around the world.

Although Australians are generally fast adopters of digital technologies—like smart phones, tablets, GPS devices, on-line buying, social media applications and games—many Queensland businesses, in particular small businesses, could be better placed to take advantage of the digital revolution.

Rural and remote Queenslanders and those facing economic and social disadvantage are potentially most at risk in the digital age. Making the right decisions on the provision of broadband and mobile communications infrastructure and service delivery can help to address the tyranny of distance and disadvantage by better connecting people and their communities, interest groups, family and friends. Digital technologies and mobile coverage also enable better access to government, community and human services.

To remain competitive, advanced economies like ours increasingly need to be economies based upon knowledge, information and high skills levels. In addition, digital technologies are critical enablers of innovation and productivity, which underpin economic growth and jobs.

Digital content and technologies are transforming the way we live and work. In the future, as consumers, we will have far greater information and choice, and we will expect personalised services. Industries and businesses that operate in traditional ways are likely to struggle to compete and many industries will be restructured because of digital disruption. New markets will emerge as we operate as part of the global economy, creating new opportunities for businesses to trade and sell goods and services globally. We face the moreimmediate challenge of how to attract young people to undertake tertiary studies in digital domains, stimulate business investment and create more internationally successful local enterprises.

Our challenge now is to position ourselves to deal with these rapid changes.

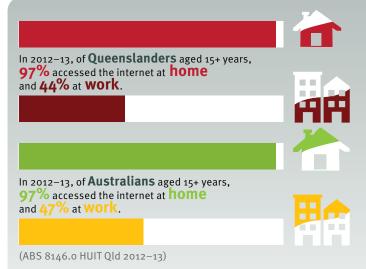
Fast facts:

In 2013, mobile broadband increased Australia's economic activity by **\$33.8 billion**. This is equivalent to 2.28 per cent of Australia's GDP.

On average, businesses reported that mobile broadband has reduced business costs by 1.4 per cent and saved 2.3 per cent of employees' time in 2013.

(ACMA, 2014)





Queensland Government's role and approach

All three levels of government are involved in digital economy activities and each has different roles and responsibilities. This strategy and action plan aims to integrate the state's approach to advancing the digital economy in partnership with the Australian Government and Queensland local governments. It also seeks to engage and involve telecommunications providers and non-government organisations representing business, professions and community groups in delivering the actions.

It is important that in the digital economy, the Queensland Government leads by example, as it has a significant influence on the state's economic and social development. It contributes around 14 per cent of Gross State Product*, employs around 13 per cent of the state's civilian workforce** and delivers a wide range of essential services in health, environmental services, education, safety, transport, justice and community services.

The Queensland Government's role in the strategy and action plan will be to:

- provide leadership in policy direction to develop Queensland's digital economy
- innovatively use digital technologies and channels to revitalise government service delivery and improve productivity within government agencies
- continue to open up government data and embrace collaborative digital platforms to involve more Queenslanders in addressing innovative policy and public services
- reduce red tape and address administrative practices inhibiting greater take-up of more efficient digital government and community services
- * Australian Bureau of Statistics, ABS 5512.0, Government Finance Statistics 2011–12.
- ** Australian Bureau of Statistics, ABS 6291.0, Labour Force, detailed, June 2012.

- enable non-government organisations that are service delivery agents for the state to have the digital capabilities to deliver high-quality services to Queenslanders
- better communicate to Queenslanders, businesses and industry the importance and relevance of the digital economy so that they are enabled to participate in, and benefit from, the digital economy.

More innovative and effective uses of digital technologies and services by the Queensland Government will:

- make it easier for customers to transact with us at their own convenience and on the device of their choice
- improve cross-agency delivery of services to Queenslanders and sharing of better, more comprehensive data and records to better match services to demand
- help to reduce the costs of service delivery and reduce the costs of interacting with government, particularly in regional Queensland.

This strategy and action plan aims to boost productivity within the government sector and the government's four pillar industries and ensure that we are better placed to deal with the economic, fiscal and demographic challenges that are facing the state over the coming decade.

The Queensland Digital Economy Strategy and Action Plan aligns with The Queensland Plan vision. The strategy and action plan can play an important part in enabling all nine of the foundation areas:

Education—contributing to schools becoming accessible learning hubs, supporting a whole-of-life approach to learning to ensure Queenslanders become, and remain, digitally literate.

Queensland Government's role and approach

- Community—ensuring equitable access to services and infrastructure.
- Regions—encouraging industry diversification and creating centres of excellence that drive innovation.
- Economy—building a competitive, contemporary business sector that is recognised internationally, has the highest productivity nationally and is a global leader in innovation.
- Health and wellbeing—improving community connectedness while contributing to individual wellbeing and innovating health services delivery.
- Environment—supporting environmental initiatives including sustainable and renewable energy solutions.
- People—using technology to develop different ways of providing and accessing services, contributing to a reputation for innovative excellence.
- Infrastructure—incorporating technology into the way we think about, operate and manage access to goods and services, creating new opportunities through technology so that we are online and connected across the state and the world.
- Governance—improving the effectiveness, efficiency and productivity of government.

This strategy and action plan will also complement and add value to a number of other key Queensland Government strategies and action plans including: Governing for Growth Economic Strategy and Action Plan, United in our pursuit of excellence agenda, ICT Strategy and Action Plan, One-Stop Shop Plan, Science and Innovation Action Plan, Blueprint for Better Healthcare in Queensland, Investing in Queenslanders: social and human services investment blueprint, Small Business Strategy and Action Plan, DestinationQ tourism strategy, Arts for All Queenslanders strategy and Youth Strategy.

The Department of Science, Information Technology, Innovation and the Arts will lead the coordination and implementation of the strategy and action plan, with all other government agencies providing support in the implementation process.

GoDigitalQld outline

The Queensland Government's vision for the digital economy is for:

Queensland to be Australia's most digitallyinteractive state and recognised globally as a digital innovation hub.

The strategic objectives that will help us achieve this vision are:

- economic growth powered by digital innovation
- 'digital-first' delivery of better government services
- full community and business participation in the digital economy through collaboration
- creating the conditions in which Queensland businesses can innovate and thrive in the digital economy
- attracting, growing and retaining talent into Queensland's digital sector and research institutions
- attracting investment and global partnerships to grow Queensland's digital economy.

These strategic objectives will be addressed under four key focus areas:

- Queensland Government
- People and communities
- Business and industry
- Digital industry.

Within each of these focus areas, there are outcomes that we are seeking to achieve through a series of actions. The actions have been identified through extensive consultation across the Queensland Government, local governments and with a wide range of non-government industry, professional, community service and regional development organisations.

Due to the dynamic nature of the digital economy, this strategy and action plan will be reviewed annually during its life.

GoDigitalQld structure

Focus area: QUEENSLAND GOVERNMENT

Desired outcomes:

- Queensland Government adopts a digital-first approach to service delivery.
- Queensland Government provides the best public services in Australia based on seamless digital services.
- More customer-centric government through digital innovations in personalisation of services, tele-enabled delivery, open data, digital records management and preservation, and greater adoption of social media/collaboration platforms to inform policy responses and design of services.
- Queenslanders can access Queensland
 Government information and services 24/7
 through their preferred digital channels.

Focus area:

BUSINESS AND INDUSTRY

Desired outcomes:

- Queensland businesses confidently adopt digital technologies to innovate and successfully exploit the global digital economy.
- Queensland businesses report high levels of satisfaction in transacting online with the Queensland Government.
- Queensland businesses are recognised as world leaders in digital innovation and customer experience.

Vision:

Queensland to be Australia's most digitally interactive state and to be recognised globally as a digital innovation hub.

Strategic objectives:

- 1. economic growth powered by digital innovation
- 2. digital-first delivery of better government services
- 3. full community and business participation in the digital economy through collaboration
- create the conditions in which Queensland businesses can innovate and thrive in the digital economy
- 5. attract, grow and retain talent into Queensland's digital sector and research institutions
- 6. attract investment and global partnerships to grow Queensland's digital economy.

Focus area:

DIGITAL INDUSTRY

Desired outcomes:

- Queensland's digital sector manage core digital infrastructure and provide costeffective and innovative services to the Queensland Government to support its digital government framework.
- Queensland's digital sector leads the nation in school and university partnerships, and employment of digital graduates.
- Queensland is recognised as a dynamic digital economy by national and international businesses and investors.

Focus area: PEOPLE AND COMMUNITIES

Desired outcomes:

- Queenslanders, regardless of their location, can affordably access a huge range of digital content and services.
- Queenslanders have a positive user experience when accessing Queensland Government digital content and services.
- Queensland's rural and remote communities are better placed to digitally access education, health and community services.
- Queenslanders lead the nation in using digital technologies and services to improve their lives and lifestyles.



Focus area: Queensland Government

The Queensland Government will take the lead by developing a *Digital Government Framework* which will adopt a digital-first approach to the future design and delivery of government services, moving to digital platforms wherever possible. It is important to note that digital first does not just mean 'digital only'. The *Digital Government Framework* will provide a model to support agencies in transitioning their functions and services to more innovative digital platforms to improve productivity and the cost-effective delivery of services.

The Queensland Government will work in close collaboration with other levels of government and non-government providers to avoid duplication of services and ensure better coordination of policy approaches and service delivery.

The Queensland Government has released its *ICT Strategy 2013–17* and *ICT Action Plan*. It has also released its *One-Stop Shop Plan 2013–18*. These complementary documents outline many of the actions to be undertaken by the Queensland Government in reform, renewal and revitalisation of frontline and other government services.

The Queensland Government is also committed to identifying and eliminating regulatory barriers and administrative practices that limit the availability of digital government services and encourage more innovative public uses of government-owned information and data.

It is estimated that the Queensland Government currently has around 100 million interactions with customers each year. Of these, approximately 35 per cent are online with similar shares in counter and telephone interactions.

While a number of transactions and interactions will always be best suited to face-to-face engagement, digital interactions offer 24/7 availability and greater customisation opportunities for customers.

They can be provided for an estimated seven per cent of the cost of counter or telephone-based services.

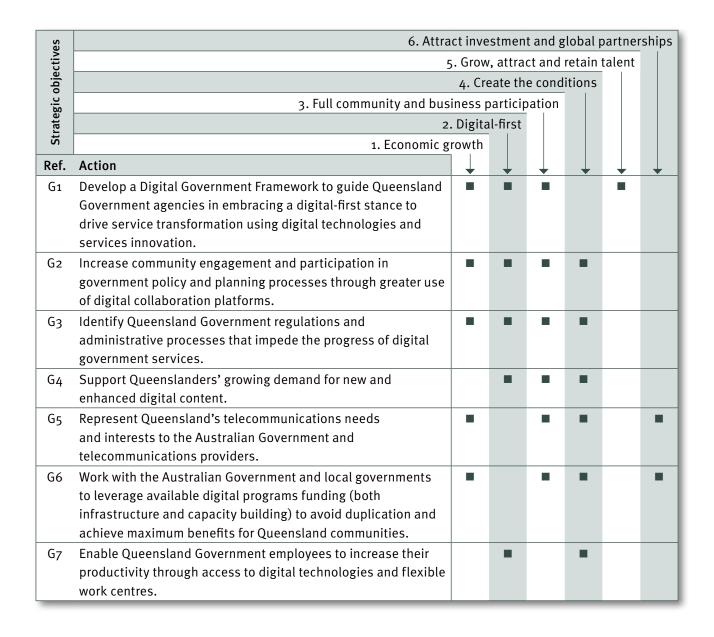
Digital content and technologies also help shift service delivery location from government facilities and institutions into people's homes, businesses or locations of choice. This allows people greater independence and enables more effective and efficient service delivery solutions to be explored.

The Queensland Government is also undergoing transformation and renewal to become the most responsive and respected public service in Australia.

Desired outcomes

- Queensland Government adopts a digital-first approach to service delivery.
- Queensland Government provides the best public services in Australia based on seamless digital services.
- More customer-centric government through digital innovations in personalisation of services, tele-enabled delivery, open data, digital records management and preservation, and greater adoption of social media/ collaboration platforms to inform policy responses and design of services.
- Queenslanders can access Queensland Government information and services 24/7 through their preferred digital channels.

Key actions: Queensland Government



Innovative digital solutions—supporting government, enhancing business, improving life.

Case study: One-Stop Shop initiative

The service

The One-Stop Shop initiative is a commitment to transform the way the Queensland Government delivers its frontline services by putting customers first.

Whether customers prefer to jump online, call or visit a counter, it will be easier to apply for and receive everything from fishing licenses and business support to camping permits and emergency updates.

The Queensland Government understands that customers, all Queenslanders, want service from their government that is the equivalent to what they receive from the best banks, retailers and other organisations.

One-Stop Shop commitments include:

- 100 new services online by the end of 2014, rising to a total of 200 new services online by the end of 2015
- a pilot of new regional customer service outlets in Scenic Rim and Lockyer Valley regions with the successful models forming a guide for streamlined service delivery across the state
- piloting new ways for customers to get answers online via social media and click to chat
- consistent service standards
- a single customer log-in and password to access a range of online services.

Information on all Queensland Government services will be available at www.qld.gov.au and on 13 QGOV (13 74 68) by the end of 2014.

The benefits

The One-Stop Shop is a win-win for all, delivering benefits for both customers and government.

The initiative promises a more efficient approach to provide simpler, clearer and faster service access and delivery for all Queenslanders. Customers will have access to Queensland Government information anytime and anywhere, on any device.

To make this possible, more services will be accessible online. This will also reduce the cost of service delivery, improve efficiency and provide staff with more time to provide better service.

The initiative includes piloting new ways to deliver services through both digital and face-to-face channels. This will enable customers to have their say about how they want to access services, and ensure service delivery is designed to meet their needs.

The fit with the strategy and action plan

The Queensland Digital Economy Strategy and Action Plan has a number of key objectives, among them encouraging greater use of digital technologies to create business opportunities that promote economic growth, and revitalising the Queensland public service so it is the best in Australia, delivering quality services to all Queenslanders, no matter where they live.

The One-Stop Shop initiative is a leading example of the use of digital technologies to create new service channels and significantly enhance accessibility to government services.

Greater online delivery means Queenslanders can access the services they need when they want using their PC, tablet and smart phone from the convenience of their own home or on the run.

The Queensland Government is committed to leading by example by making effective use of digital technologies to improve delivery of services to all Queenslanders.





Focus area: People and communities

The Queensland Government's role in this focus area is primarily to identify and remove barriers to digital access, participation and innovation, work in partnership with local governments and non-government organisations to provide access to basic digital literacy for disadvantaged Queenslanders, and ensure our digital government services are user-friendly and customer-focused.

To increase the level of digital adoption and online participation rates by our communities, it is necessary to improve access to digital infrastructure, raise levels of digital literacy and confidence, improve the affordability of internet services, and improve the overall user experience of digitally-enabled services.

It is important that we close the gap for those Queenslanders who do not currently have access to internet services or experience poor services. These 'unconnected' citizens require information, help from trusted sources, and access to affordable internet services in order to experience the benefits of digitally-enabled services.

While the primary focus of this strategy and action plan is on how Queenslanders will access and use digital government services in the future, we also want to see all Queenslanders (as consumers) embracing and using digital content and technologies to improve their lives and lifestyles.

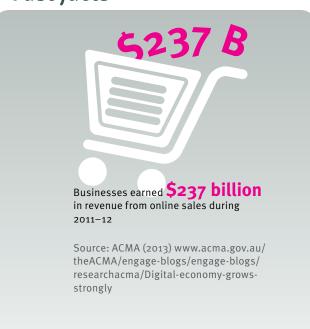
Queenslanders are on a digital journey as they learn more about the technology options available to them and the wide array of information and services that can be accessed online. There is a fundamental shift occurring with the rise of mobile technologies like smart phones and tablets. In response to this shift, online services are increasingly being delivered by downloadable applications or 'apps'.

A number of the actions in this focus area may be better delivered by non-government organisations closest to the people who need assistance. In this regard, partnering arrangements between various levels of government and community service providers are likely to be an important element in delivering on this strategy.

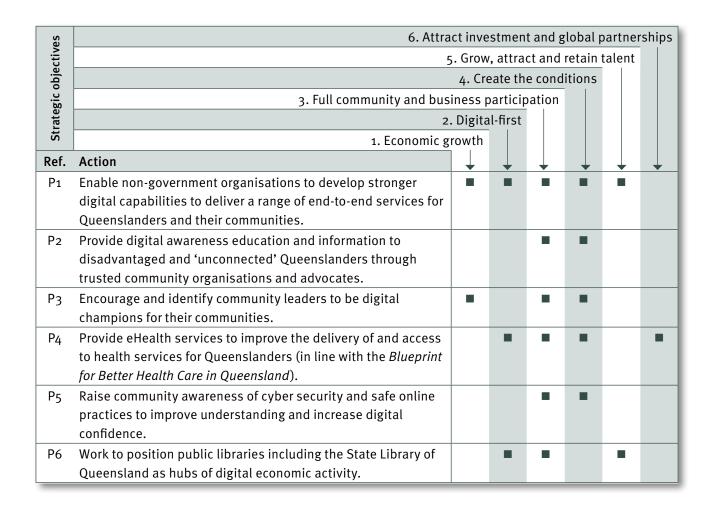
Desired outcomes

- Queenslanders, regardless of their location, can affordably access a huge range of digital content and services.
- Queenslanders have a positive user experience when accessing Queensland Government digital content and services.
- Queensland's rural and remote communities are better placed to digitally access education, health and community services.
- Queenslanders lead the nation in using digital technologies and services to improve their lives and lifestyles.

Fast facts



Key actions: People and communities



Innovative digital solutions—supporting government, enhancing business, improving life.

Case study: The Learning Place

The service

Queensland's Department of Education, Training and Employment (DETE) has developed a secure eLearning environment where teachers and students can learn online.

The Learning Place provides access to an innovative range of collaborative tools, digital resources and online spaces to support teaching and learning, collaboration and networking.

The Learning Place can be found at www.education.qld.gov.au/learningplace.

The benefits

Great learning comes from great teaching. Innovative use of digital technologies enhances both learning and teaching—the cornerstone of DETE's Learning Place.

DETE understands that creative and productive use of technology improves learning and expands knowledge and capabilities; the Learning Place achieves this.

The Learning Place supports a wide range of online digital pedagogies, eSpaces and digital resources to enable teachers to develop learning experiences to suit the individual needs of the student. Through digital technology, DETE has extended its reach and support for teachers wanting to teach in innovative ways and for Queensland students wanting to learn in a flexible environment; in a time and place that suits them.

The fit with the strategy and action plan

DETE is embracing digital technologies to expand and enhance its services and learning support tools. The Learning Place supports contemporary teaching practice providing students with the ability to control their own learning and reach individual milestones via a digital technology-enriched environment.

This approach to learning enables rural and remote Queensland schools to have the same digital access to education services. It is also a significant contributor to the Queensland Government's digital economy vision for 'Queensland to be Australia's most digitally interactive state and recognised globally as a digital innovation hub'.

Fast facts: Usage of the Learning Place



17,130 virtual classrooms support professional development and student learning



255 staff and student courses written by experts in the field



57,200 quality assured digital learning resources and **130,000** eBooks and online journals



190,000 participants in **37,700** web conferencing professional development sessions



Focus area: Business and industry

The Queensland Government views the state's businesses and industry sectors as the engine room of our economy. Business confidence and competitiveness are vital to our economic wellbeing. Our economic growth will also be driven by Queensland businesses and industries winning new markets and our ability to attract new investment to build our economic capacity.

The internet is disrupting and transforming industries around the world with markets becoming global and competition coming from unexpected directions. Supply chains are being transformed, taking on a global dimension and providing consumers with unprecedented choice.

The capacity of businesses to benefit from digital technologies is most likely to be dependent on how 'digitally capable' they are. Digital capability is still an evolving concept. While we would expect to see greater opportunity for businesses to be able to increase their digital capability, the most powerful attribute for small businesses at this stage is to have the capability to take customer orders and transact online. The key benefit for businesses in taking orders online is the potential to increase sales by reaching new customers—typically beyond their current markets—and defending existing markets with enhanced online services.

This focus area is about supporting future actions that could contribute to increased use of the internet, digital technologies and services to improve Queensland businesses' productivity and competitiveness by defending existing markets and growing new markets. It is also important that more Queensland businesses have the capability to trade online and participate in global supply chains.

The role of the Queensland Government in this focus area is primarily to:

- encourage and promote collaborations between industry and professional bodies (and other trusted organisations) aimed at coordinated and targeted actions that improve the overall digital business maturity levels of Queensland's small and medium business community across the state
- lead and support initiatives aimed at improving the productivity of the government's pillar industries (and businesses) through successful adoption of digital technologies and services
- identify and reduce regulatory and administrative barriers that inhibit Queensland businesses from embracing digital business practices
- introduce more small business-friendly online government tendering and reporting systems
- continue to improve online access to business licensing and regulations for industry sectors.

Desired outcomes

- Queensland businesses confidently adopt digital technologies to innovate and successfully exploit the global digital economy.
- Queensland businesses report high levels of satisfaction in transacting online with the Queensland Government.
- Queensland businesses are recognised as world leaders in digital innovation and customer experience.

Key actions: Business and industry

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Ref.	Action] ↓	\downarrow	\	\downarrow	\downarrow	\downarrow
В1	Build stronger links and collaborations between the						
	government's four pillar industries and the digital sector to lift						
	productivity and create new jobs.						
B2	Establish a Queensland Digital Business Collaboration Group						
	(QDBCG) to set strategic priorities, coordinate actions and						
	share content/resources to benefit Queensland businesses.						
В3	Enable more Queensland small and medium businesses to						
	successfully tender online for government business.						
В4	Work with local governments and private sector providers						
	to promote the benefits of flexible work centres to improve						
	organisational productivity and innovation.						

Fast facts: Teleworking by employees of small and medium businesses



Innovative digital solutions—supporting government, enhancing business, improving life.

Case study: Rural Telehealth Service

The service

Queensland Health commenced its Rural Telehealth Service in early 2013 to provide patients in remote clinics with visual access to doctors in cities via a video link.

Thanks to Telehealth, patients in remote areas of Queensland can now see their Queensland Health specialist in larger towns, without having to leave their local communities.

The service is effectively an extension of the way patients and their relatives can communicate with nurses, doctors and other specialists by using videoconferencing, in most cases.

In this way, Telehealth enables better access to specialist clinicians while at the same time reduces travel cost and inconvenience for people in rural and remote Queensland.

Telehealth will feature strongly in the future delivery of health care in regional and rural Queensland and aims to improve health outcomes for all Queenslanders. Queensland Health's investment in the service is \$30.9 million over four years and will transform the health system into one that is reliable, sustainable and innovative.

Queensland's Rural Telehealth Service is delivered across one of the largest managed telehealth networks in Australia with more than 2000 systems deployed in over 200 hospitals and community facilities.

The benefits

Put simply, many rural and remote Queenslanders requiring access to medical expertise, including the best clinicians in the state, now have it thanks to Queensland Health's Rural Telehealth Service.

The service helps address the continuing problem of recruiting and retaining medical practitioners in small, remote communities—and the associated spiralling costs.

It allows patients in rural and remote locations to talk to and see a health professional from major hospitals in Queensland, without the need to travel too far from home. It provides better access to health care and reduces the burden associated with travelling and waiting for a specialist.

The fit with the strategy and action plan

Queensland's Telehealth program directly supports three of the strategy's four key focus areas:

- Queensland Government
- People and communities
- Business and industry.

Using digital technologies, the Telehealth Service ensures that all Queenslanders, irrespective of location, have access to health professionals and services. The service delivers significant cost savings, which can be diverted to other frontline government services. The service also encourages and promotes collaboration between industry and professional bodies. Such an example is the joint venture between the CSIRO and Queensland Government to create and promote the Australian e-Health Research Centre—a leading national research facility in ICT for healthcare innovations http://aehrc.com.





Focus area: Digital industry

This focus area is about supporting future actions that strengthen the capacity of Queensland's digital sector to contribute to the future economic and social development of Queensland. The focus will be on building stronger government and cross-industry partnerships, increased production (intellectual property) of innovative Queensland digital solutions, attracting bright and talented people into digital careers and startups, encouraging targeted research efforts, attracting investment and international partnerships. The enabling activity provided by the work in this focus area is critical to supporting the other focus areas.

The role of the Queensland Government in this focus area is primarily to:

- partner with the local digital industry in the move to ICT-as-a-service and the innovative design and transitioning of Queensland Government services to digital channels
- implement the Queensland Government's new ICT industry registration and pre-qualification option
- support digital skills development and encourage collaborations with industry and tertiary education sectors
- promote Queensland's digital strengths and success stories and attract inbound investment into Queensland.

Queensland's digital and creative industries have grown significantly over the past decade. The sector also hosts world-class education and research institutions. This has given rise to several world leading firms and technologies. Brisbane and South East Queensland are also gaining momentum as an emerging location for digital startups. Queensland's digital education and careers collaboration initiative is unique in Australia and has had a highly-positive impact on attracting more young Queenslanders to undertake ICT-related

tertiary studies and pursue knowledge-based jobs, entrepreneurship and research careers.

The Queensland digital sector can play an important part in building awareness and knowledge within Queensland's pillar industries of relevant and emerging technologies that can increase the productivity of these businesses and strengthen their position in global supply chains. The digital sector can also partner with Queensland Government agencies and non-government providers to provide better and more innovative solutions to deliver government services to Queenslanders.

There is an opportunity to strengthen relationships between the Queensland digital industry and the university and research sector to provide work-ready graduates and to develop and commercialise more world-class digital technologies in Queensland. Limited access to venture capital and Australia's relatively stringent laws relating to employee share ownership schemes and crowd-sourced funding are inhibiting the development of digital technologies and services developed by local firms and start-ups. These are policy areas where the Queensland Government can actively engage with the Australian Government.

Desired outcomes

- Queensland's digital sector manages core digital infrastructure and provides cost-effective and innovative services to the Queensland Government to support its digital government framework.
- Queensland's digital sector leads the nation in school and university partnerships, and employment of digital graduates.
- Queensland is recognised as a dynamic digital economy by national and international businesses and investors.

Key actions: Digital industry

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Ref.	Action		1	<u> </u>	\downarrow	\downarrow	\downarrow
D1	Foster partnerships with the local digital industry to provide digital infrastructure and innovative services to enable the Queensland Government to implement ICT-as-a-service and the One-Stop Shop initiatives.		•		•	•	•
D2	Increase the longer-term capacity and capability levels of digital skills in Queensland.				•		
D3	Partner with Brisbane Marketing to establish a world-first Chair in Digital Economics at a university in Queensland.		•	•		•	
D4	Increase digital entrepreneurship in Queensland through stronger collaboration between education, business, investor and government sectors.				•		•
D ₅	Engage with the Australian Government to achieve policy and regulation outcomes that stimulate high growth potential digital startups in Queensland.				•	•	
D6	Attract new investment into Queensland's digital sector through coordinated effort between local industry, universities, regional and government organisations.	•			•	•	•

Fast facts: The Queensland Plan

Digital technologies played a key role in the development of *The Queensland Plan: a 30-year vision for Queensland* where more than 80,000 people contributed to the process.

Innovation drove the development process from the collaborative design to digital engagement, including:

- webjams—engaged almost 1000 people in live, unrestricted online consultation
- online survey to capture community feedback and invite Queenslanders to remain engaged
- open data—community feedback raw data was publicly released offering Queenslanders a new level of access and providing ongoing value
- social media—Queensland's bright minds and community spirit were showcased by sharing

information through social media:

- Facebook and Twitter for connecting
 Queenslanders to events and encouraging conversation about key issues
- live streaming of events, linked to social media, to enable participation from regional communities
- voices of Queensland invited people to share their future vision via YouTube
- enabling Members of Parliament (MPs) to monitor progress during the consultation process:
 - individualised online portal provided instant access to valuable resources, data and results
 - on-the-go app for smart phones and tablets provided current information supporting effective engagement.

Innovative digital solutions—supporting government, enhancing business, improving life.

Case study: Queensland Globe

The service

Using the Google Earth™ application, the award-winning Queensland Globe is a fantastic interactive online tool enabling users to visualise and explore Queensland maps, imagery, up-to-date satellite images, and other spatial data held by the Queensland Government including its most current satellite imagery and aerial photography on which can be overlaid more than 250 data sets.

Data accessible with Queensland Globe includes the most comprehensive 'base map' available for Queensland comprising:

- places and addresses
- boundaries (e.g. coastline, local government, electorate, postcode)
- schools
- wildlife and habitats
- geology
- floods
- roads, rail and transport
- land parcel and land parcel tenures
- contours and topography.

On top of the Queensland Globe base map can be simply added hundreds of additional data layers related to a diverse and wide range of topics, from floods to mining, natural resources, farming, land use, the environment, transport, education and much more.

Queensland Globe launched in 2013 and is available at www.dnrm.qld.gov.au/mapping-data/maps.



The benefits

The Queensland Government has extensive spatial information which was previously confined to expert users. Queensland Globe was made possible under the government's open data strategy and is a simple way to use and visualise the wealth of data now freely available on the government's Open Data portal (www.data.qld.gov.au).

Queensland Globe, developed by the Department of Natural Resources and Mines, is free, requires no training and can be used as an interactive online tool by anyone—government, business or the general public.

It provides access to a wide range of spatial information, includes customised search functionality and can be accessed from a desktop, smart phone or tablet.

This is a significant productivity tool for business and government and an important open data resource for the public.

The fit with the strategy and action plan

A strategic role the Queensland Government plays in advancing the digital economy is to use digital technologies and channels, in innovative ways, to revitalise delivery of its services. Further, the government is continuing to open up government data for use by business and the public.

The Queensland Globe application is a great example of how digital technologies and freely available government and public data (for example the list of mobile apps developed by the Queensland Government) are being combined to deliver endless service opportunities to Queenslanders.

This mapping and data application makes it easy for users to transact with government, its services and its information, at convenient times that suit users. Queensland Globe is just one way the government is living its commitment to a digital-first approach to delivery of improved government services.

Action Plan



Focus area: Queensland Government

Dof.	Sub-actions	Lead	Estimated
Kei:	Sup-actions	agency	completion

Action: Develop a Digital Government Framework to guide Queensland Government agencies in embracing a digital-first stance to drive service transformation using digital technologies and services innovation.

G1a	Develop the scope of a Digital Government Framework using international models.	DSITIA	June 2015
G1b	Undertake a digital maturity benchmarking audit.	DSITIA	June 2015
G1c	Develop a whole-of-government approach to benchmarking digital	DSITIA	June 2016
	maturity of agencies.		

Action: Increase community engagement and participation in government policy and planning processes through greater use of digital collaboration platforms.

G2a	Undertake trials of digital collaboration platforms, assess their relevance	DSITIA	December
	and share learnings across government.		2015
G2b	Targeted use of social media to engage stakeholders in reform programs.	DCCSDS	Ongoing

Action: Identify Queensland Government regulations and administrative processes that impede the progress of digital government services.

G3a	Develop a scoping paper with agencies to establish the parameters of	DSITIA	December
	regulatory reform for digital government services.		2015
G3b	Develop an online safety and compensation service that combines	DJAG	December
	WorkCover Queensland, Workers' Compensation Regulator (formerly		2014
	QCOMP), Workplace Health and Safety, and Electrical Safety Office		
	services into a single, streamlined online service, which will reduce		
	complexity and red tape burden on Queensland businesses.		

Action: Support Queenslanders' growing demand for new and enhanced digital content.

	recom support Queenstanders grenning demand for new and emigreal sentents					
G4a	Continue to open up Queensland Government data to the public and	DPC	Ongoing			
	encourage innovative uses.					
G4b	Establish a panel arrangement to enable the delivery of standards-	DSITIA	2017			
	compliant whole-of-government digitisation services.					
G4c	Explore digital archiving solutions to improve the long-term management	DSITIA	December			
	of, and access to, government digital information assets by the		2014			
	community and government.					
G4d	Utilise the established electronic repository of Queensland's life event	DJAG	June 2015			
	records (i.e. births, deaths and marriages).					

Dof.	Sub-actions	Lead	Estimated
Kei:	Sup-actions	agency	completion

Action: Represent Queensland's telecommunications needs and interests to the Australian Government and telecommunications providers.

G5a	Identify broadband and mobile coverage gaps in Queensland.	DSITIA	October 2015
G5b	Leverage Queensland Government telecommunications assets to	DSITIA	Ongoing
	optimise telecommunications investment into Queensland.		
G5c	Consider Royalty for the Regions funding for projects which address	DSDIP	June 2015
	telecommunications gaps in regional and remote areas particularly		
	where local government and private sector investment is leveraged.		

Action: Work with the Australian Government and local governments to leverage available digital programs funding (both infrastructure and capacity building) to avoid duplication and achieve maximum benefits for Queensland communities.

G6a	Investigate options with the Australian Government to continue the	DSITIA	Ongoing
	delivery of digital economy skills programs across Queensland.		
G6b	Work with Australian Government and local governments to identify	DSITIA	Ongoing
	opportunities to jointly deliver on actions and initiatives contained in		
	regional digital economy strategies.		

Action: Enable Queensland Government employees to increase their productivity through access to digital technologies and flexible work centres.

	······································		
G7a	Undertake a flexible work centres trial for Queensland Government	DSITIA	April 2015
	Brisbane CBD staff.		
G7b	Provide guidance on the development of capabilities to support	DSITIA	March 2016
	workforce mobility.		



Focus area: People and communities

Dof.	Sub-actions	Lead	Estimated
Kei:	Sub-actions	agency	completion

Action: Enable non-government organisations to develop stronger digital capabilities to deliver a range of end-to-end services for Queenslanders and their communities.

P1a	Consult with non-government organisations (NGOs) and the ICT industry	DCCSDS,	Ongoing
	on data sharing opportunities (such as Community Door or Open Data).	DPC, QTT	
P ₁ b	Work with stakeholders to explore opportunities to develop and trial	DCCSDS	Ongoing
	innovative services and investment approaches that deliver results		
	(performed through the use of showcases, NGO business portal,		
	industry-to-industry interaction, setting purchaser expectations of		
	digital capabilities through social service reform).		

Action: Provide digital awareness education and information to disadvantaged and 'unconnected' Queenslanders through trusted community organisations and advocates.

P2a	Work with NGOs to deliver education and awareness programs to improve	DCCSDS	Ongoing	
	digital literacy and accessibility for disadvantaged Queenslanders.			

Action: Encourage and identify community leaders to be digital champions for their communities.

		•	
Рза	Develop program guideline and support materials.	DSITIA	December
			2014
P3b	Host a community digital champions annual roundtable in Parliament.	DSITIA	December
			2016

Action: Provide eHealth services to improve the delivery of and access to health services for Queenslanders (in line with the Blueprint for Better Health Care in Queensland).

	· · · · · · · · · · · · · · · · · · ·		
P4a	Continue to expand the Rural Telehealth Service improving access to	Health	June 2017
	clinical services and health outcomes for people in rural and remote		
	Queensland.		
P4b	Enable clinicians and supporting staff to provide improved patient care	Health	June 2016
	through the development of a shared, state-wide, authoritative source of		
	information for patient health records.		
P4c	Explore opportunities to adopt the National Health Services Directory to	Health	February 2015
	enable improved access to health services information nationally and		
	across the Queensland health system and to streamline secure transfer		
	of messages to general practitioners from public hospitals.		

Ref: Sub-actions	Sub actions	Lead	Estimated
Kei:	Sub-actions	agency	completion

Action: Raise community awareness of cyber security and safe online practices to improve understanding and increase digital confidence.

P5a	Support Australian Government public awareness campaigns and	DSITIA	Ongoing
	programs in Queensland.		
P ₅ b	Promote public libraries as safe and supportive places where community	SLQ	Ongoing
	and small business can engage with the digital economy and acquire		
	relevant digital skills.		

Action: Work to position public libraries including the State Library of Queensland as hubs of digital economic activity.

P6a	Foster community engagement about the uses and benefits of the internet and digital technologies through statewide online learning programs which build digital skills in community members, including in	SLQ	Ongoing
	remote Indigenous communities.		
P6b	Build local government staff skills to lead and participate in the digital economy in regional and remote areas through development of a module on the SLQ ConnectEd online learning platform.	SLQ	October 2015
P6c	Continue to offer grant funding for technology innovation to all communities in Queensland with a public library.	SLQ	Ongoing
P6d	Facilitate increased uptake by the arts and cultural sector in the use of digital technologies as a tool to engage cultural tourists and strengthen Queensland's presence in national and international markets.	DSITIA	Ongoing



Focus area: Business and industry

В	of.	Sub-actions	Lead	Estimated
K	ei:	Sub-actions	agency	completion

Action: Build stronger links and collaborations between the government's four pillar industries and the digital sector to lift productivity and create new jobs.

В1а	Deliver Partners in Digital Productivity forums with a focus on the pillar	DSITIA	December
	industries.		2014
B1b	Development of Smart Energy Dwellings (with smart climate systems) using a partially cloud-based Home Energy Management System. Seven dwellings with prototype smart climate systems are to be constructed in	DSDIP	June 2015
	2014.		

Action: Establish a Queensland Digital Business Collaboration Group (QDBCG) to set strategic priorities, coordinate actions and share content/resources to benefit Queensland businesses.

B2a	Develop operating charter and annual activity plan for the QDBCG.	DSITIA	February 2015
B2b	Investigate the opportunity for an International Digital Thought Leaders	DSITIA	December
	initiative.		2014

Action: Enable more Queensland small and medium businesses to successfully tender online for government business.

Вза	Tendering material offered through the Business and Industry Portal will	DTESBCG	Ongoing
	assist small to medium sized businesses become aware of, and access		
	opportunities associated with, the Forward Procurement Schedule for		
	the 2018 Commonwealth Games.		

Action: Work with local governments and private sector providers to promote the benefits of flexible work centres to improve organisational productivity and innovation.

	, , ,		
В4а	Work with South East Queensland local governments to progress the	DSITIA	Ongoing
	Digital Work Hubs report.		
B4b	Collaborate with the private sector to accelerate the emergence of a	DSITIA	Ongoing
	network of flexible work centres in South East Queensland.		



Pof.	Ret: Sub-actions	Lead	Estimated
Kei:		agency	completion

Action: Foster partnerships with the local digital industry to provide digital infrastructure and innovative services to enable the Queensland Government to implement ICT-as-a-service and One-Stop Shop initiatives.

D1a	Foster partnerships with the local digital industry by seeking	DSITIA	December
	participation in developing innovative solutions to enable the		2015
	Queensland Government One-Stop Shop initiative.		
D1b	Foster partnerships with the local digital industry to provide digital	DSITIA	January 2015
	infrastructure to implement ICT-as-a-service.		

Action: Increase the longer-term capacity and capability levels of digital skills in Queensland.

D2a	Support digital careers to deliver the Digital Careers Program and	DSITIA	June 2015
	i choose technology activities in Queensland.		
D2b	Implement the National Schools Curriculum technology stream into	DETE	Ongoing
	Queensland schools.		

Action: Partner with Brisbane Marketing to establish a world-first Chair in Digital Economics at a university in Queensland.

D3a	Develop Queensland Government statement of priorities to inform the	DSITIA	December
	scope of the Chair.		2014
D3p	Support the Chair in their engagement with the Queensland Government,	DSITIA	June 2015
	local government and local digital industry.		

Action: Increase digital entrepreneurship in Queensland through stronger collaboration between education, business, investor and government sectors.

D4a	Actively support and encourage collaborations.	DSITIA	Ongoing
D4b	Map Queensland's entrepreneurial ecosystem.	DSITIA	July 2015

Action: Engage with the Australian Government to achieve policy and regulation outcomes that stimulate high-growth potential digital startups in Queensland.

D5a	Advocate for revision of legal and taxation regimes to be startup and	DSITIA	Ongoing
	hi-tech venture friendly and encourage risk capital and human resource		
	investment.		

Action: Attract new investment into Queensland's digital sector through coordinated effort between local industry, universities, regional and government organisations.

D6a	Develop an investment prospectus highlighting Queensland's value	DSITIA	May 2015
	proposition and opportunities.		
D6b	Promote specific investment opportunities in Queensland's digital	TIQ	Ongoing
	sector.		

Queensland Government acronyms

DCCSDS Department of Communities, Child Safety and Disability Services

DETE Department of Education, Training and Employment

DJAG Department of Justice and Attorney-General

DPC Department of the Premier and Cabinet

DSDIP Department of State Development, Infrastructure and Planning

DSITIA Department of Science, Information Technology, Innovation and the Arts

DTESBCG Department of Tourism, Major Events, Small Business and the Commonwealth Games

Health Department of Health

QTT Queensland Treasury and Trade

SLQ State Library of Queensland

TIQ Trade and Investment Queensland

Glossary of terms

Term	Definition
Applications or 'apps'	Refers to application software and is frequently used to mean mobile downloadable applications or computer programs. Depending on the activity for which the app was designed, an application can manipulate text, numbers, graphics, or a combination of these elements.
Cloud computing	An ICT sourcing and delivery model for enabling convenient, on-demand access to a shared pool of configurable computing resources over the network (e.g. networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. Source: Australian Government: 2013. Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.
Collaborative platforms	Examples of collaborative platforms include Box, Citrix Podio, Cisco WebEx Social, IBM Connections, Jive Social Business Platform, Microsoft SharePoint and Yammer, Salesforce Chatter, and SAP Jam.
Crowdsourcing	The practice of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, and especially from an online community, rather than from traditional employees or suppliers.
	Source: en.wikipedia.org/wiki/Crowdsourcing (accessed 17/10/2013).
Cyber	Relating to electronic communication networks and virtual reality.
	Source: Australian Government: 2013. Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.
Cyber security	The full range of measures (strategy, policy and technology) associated with securing and strengthening our digital environment. A key component of responsible digital citizenship.
	Source: Australian Government: 2013. Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.
Digital capability	An organisation's capacity to respond positively to change in digital technology and services.
	Source: Adapted from Developing Digital Literacies: Briefing Paper in support of JISC Grant Funding 4/11 www.jisc.ac.uk/media/documents/funding/2011/04/Briefingpaper.pdf (accessed 1/10/2013).
Digital disruption	About how much additional change a business will experience in the years to come, and how a business can realise its potential across a spectrum of digital opportunities by building on the way it currently uses digital technologies and organises business processes.
	Source: Deloitte: 2012. Digital Disruption – Short Fuse, Big Bang www.rundlemall.com/bm.doc/deloitte-retail-researchdigital-disruption.pdf (accessed 26/09/2013).
Digital	The global network of economic and social activities that are enabled by information and
economy	communications technologies, such as the internet, mobile and sensor networks.
	Source: Australian Government: 2013. Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.
Digital-first	Using digital channels as the primary or preferred means of delivery for government information and services.
	Source: Australian Government. www.finance.gov.au/blog/2013/06/13/digital-first-and-aps-ict-strategy/

Digital literacy	The skills and ability to participate safely, securely, confidently and lawfully online in order to take full advantage of the opportunities available in the digital age.
	Source: Australian Government: 2013. Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.
Downloadable	Documents and/or services, which are transmittable from one computer to another.
Flexible work centres	Often referred to as co-working spaces, flexible work centres are an alternative approach for employees to undertake teleworking. They fall between the usual place of work and home-based work, offering employees the opportunity to interact with other co-workers in an inspiring and creative work environment, with subsequent organisational benefits for their employing organisation.
Internet	The global system of interconnected computer networks.
	Source: Australian Government: 2013. Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.
Online	Connected to the internet and able to share data and information with other computing devices.
	Source: Australian Government: 2013. Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.
Open data	Data that is freely available to the public.
	Source: Australian Government: 2013. Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.
Social media	Online technologies and practices that people use to share opinions, insights, experiences and perspectives. Can take many different forms, including internet forums, social networking, social blogs, wikis, podcasts, pictures, video, rating and bookmarking.
	Source: Australian Government: 2013. Advancing Australia as a Digital Economy: An Update to the National Digital Economy Strategy.
Social network	The means of interactions among people in which they create, share, and/or exchange information and ideas in virtual communities and networks.
	Source: T Ahlqvist, A Bäck, M Halonen, S Heinonen: 2008. Social Media Road Maps Exploring the Futures Triggered by Social Media.
Telehealth	According to the International Organization for Standardisation, telehealth is the 'use of telecommunication techniques for the purpose of providing telemedicine, medical education, and health education over a distance', while drawing a distinction between this and telemedicine, which is defined as the 'use of advanced telecommunication technologies to exchange health information and provide health care services across geographic, time, social and cultural barriers'. Source: Australian Government.
- 1 1	www.health.gov.au/internet/main/publishing.nsf/Content/e-health-telehealth
Telework	Working from home on a scheduled or regular basis, while using high-speed broadband to stay connected to the office.
	to stay connected to the onice.

