

# Digital Productivity Report 2015

# 2013

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# President's foreword

**Two years ago we conducted the first Digital Productivity survey.** Since then we have seen how continual innovation is challenging many traditional business models. We are seeing the expansion of innovative ways to sell and access traditional products across Queensland. Convenience and the individual experience is the hallmark of these new and reinvented digital business models.

These innovative businesses and their underpinning technologies are becoming ever present in our lives and are now a key part of the way we communicate with friends and family, transact business, and even do our jobs. The domination of smart phones and apps, the opportunities to connect created by social media, and the use of data analysis have torn down old business models and created more jobs.

This digital shift has also allowed organisations to increase their productivity, ensuring their financial sustainability and their capacity to offer new services.

Local councils across Queensland have been part of this step change and have begun to truly embrace innovative technology as part of their business strategy to reduce costs, improve efficiency and deliver better customer services.

This change has happened very quickly and some councils are more comfortable and prepared for the inevitable transformation than others. For this reason, I am very interested in understanding the thoughts of councils and the issues that concern you about the digital economy.

This is the second report in a series to understand where councils are on this journey. It reports not only on the current attitudes and digital readiness of councils but also on how these measures have changed in the last two years.

The survey results show that councils want to connect and collaborate with their communities in new ways and to be more productive. But it also shows councils need additional measures to ensure they can achieve these goals. It highlights the need for state-wide communications infrastructure, the need for increased investment and the potential for collaboration between councils.

I acknowledge the Industry Development Fund and Glentworth for their ongoing support and insights for this report. I look forward to reading future reports in which Queensland's local governments use digital technology to help them grow and prosper.

**Councillor Margaret de Wit,  
Local Government Association of Queensland, President**



## **The Local Government Association of Queensland (LGAQ) recently conducted a Digital Productivity Survey to determine current practices related to:**

- productivity gains from technology investments,
- adoption of digital engagement platforms within local councils in Queensland and,
- the use of technology and digital platforms.

The results provide important insights into Queensland's economy, the receptiveness of councils to digitally-enabled solutions and their readiness to implement future digital change.

This change is currently being driven by a number of pressing business needs within local government in Queensland, the move towards different ways of consuming information and technology services, and by the changing face of digital infrastructure.

## **Changing business needs**

It is becoming more and more difficult for local governments to provide the services their community expects using traditional funding sources.

Councils are facing rising expenditures as a result of a significant increase in the cost of providing core services like roads, and at the same time they are facing declining revenues due to the stagnation in rates revenues and a decline in state and federal government funding.

This financial crunch is particularly evident in areas which have been hit by natural disasters and those suffering through prolonged drought, as these councils have the added burden of reconstructing while their rate base is lower.

Members of the community are also expecting more responsive local services and increased engagement, adding a layer of additional pressure.

Generational change including the generation of "digital natives", those who have grown up with technology (smart phones, iPads, always-on connectivity to the internet) as a norm, are placing their need at the centre of interactions with council transactions. They want to access services on their terms, at a time that is suitable for them – 24/7.

Without increasing rates or substantially decreasing the services councils provide to their communities, both of which would negatively impact the lives of residents, there is one practical option: increase the efficiency and productivity of councils.

Councils are increasingly looking towards digital means to increase productivity while providing the level of service their communities are coming to expect.

# Introdu

## Different ways of consuming technology

Organisations around the world are moving from a model where they fund technology through a large capital investment to a model where they consume technology as-a-service – consumption based computing.

This allows them to not only avoid a large up-front cost but also allows for the service to be appropriately scaled to fit changing business needs and to be “switched off” when it’s not required.

This move to “as-a-service” has been a core change in the technology industry in the last decade and has allowed organisations, including local governments, to be more focussed on their core business rather than the technology which underpins it.

More than 50 councils in Queensland are moving to this model, with a number using the cloud for internet access, voice, data, and multiple operational services.

## Digital Infrastructure

The ongoing investment in both the core and access telecommunication networks, by commonwealth and state governments, carriers, the NBN and even councils themselves, has allowed councils the opportunity to embrace novel technologies to ensure that their operations are as efficient as possible.

The use of asset tracking and mobile productivity applications have been particularly important for councils, as it has allowed significant asset utilisation and large operational cost reductions.

Each of these drivers are currently changing, and will continue to change, the environment councils are operating in.

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## HOW MANY COUNCILS RESPONDED?

77

Queensland has 77 Local Government areas

66

66 local government areas responded to the survey

95%

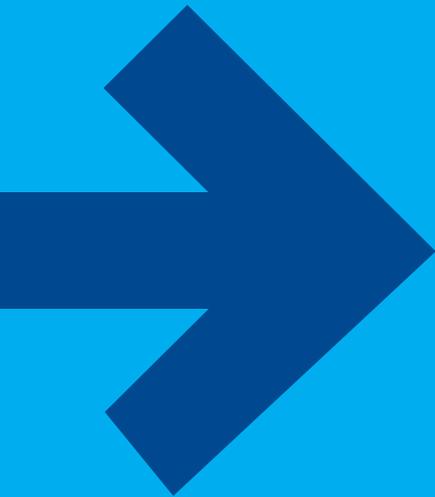
5%

The survey responses are based on a 95% level of confidence allowing for 5% margin of error

65+

The survey is considered to be statistically valid as the response rate was greater than 65 local government areas.

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# Action

Queensland's councils provide a wide variety of services to their local areas. Historical responsibilities such as roads, rubbish collection and the provision of social infrastructure like parks, cemeteries and playgrounds are now complimented by a range of non-traditional services such as child and aged care facilities, telecommunication infrastructure, and community health services. While these services are essential for the community and recognising the cost-shifting nature of Commonwealth and State Governments are combining in ways that strain councils trying to put downward pressure on rates.

For this reason councils are starting to look at ways these services can be provided to the community more efficiently. One of the key mechanisms currently being embraced is digital technology.

The 2013 Digital Productivity Report identified that councils were aware of the benefits of introducing a technology to improve productivity, but were challenged in understanding what solutions were available, what solutions were low risk and off-the-shelf, and finding trusted partners.

This survey explored councils' attitude towards productivity drivers including; better decision-making, efficient operations, improved processes, costs reduction and risk management. The survey found that councils remain interested in gaining 'digital benefits' and are starting to utilise it more in their business operations.

# Section 1

# Efficient

# Operations

## Key findings

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**Reducing costs remains the highest priority for councils.**



**69% of councils see technology as a driver of increased productivity.**



**Over half of councils use data and information to make better decisions, but 24% of councils are unable to do so due to the poor quality of their information or difficulties in gaining access to it.**



**There is a high level of commitment to using information to provide better services to the community, with 84% of councils committed to that goal.**



**92% of councils are optimistic towards transitioning to a digital way of working.**



**A majority of councils are interested in exploring the benefits of advanced business analytics to find efficiencies in their operations.**

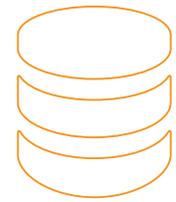


**Councils are investing in mobile applications to assist their workers to have access to real-time information on the go.**



**Councils are also interested in trialling new technologies like smart water meters in an attempt to increase efficiencies.**

# Making better decisions

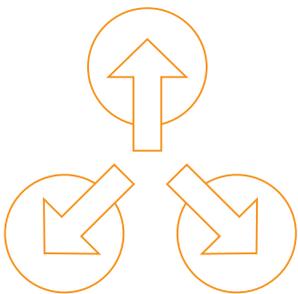
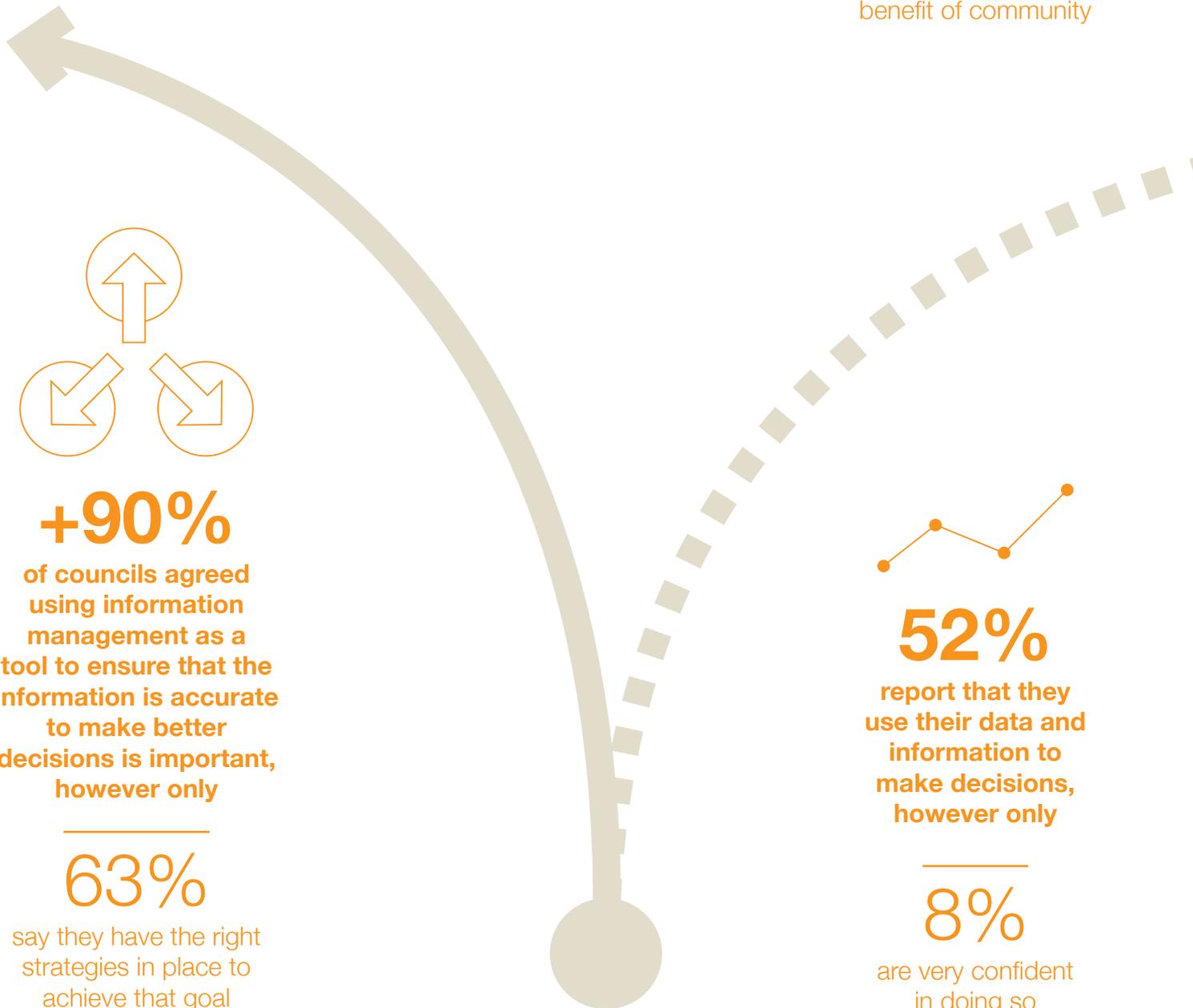


**+50%**

of councils understand the value of their data, but only

**35%**

have a strategy to release data for the benefit of community



**+90%**

of councils agreed using information management as a tool to ensure that the information is accurate to make better decisions is important, however only

**63%**

say they have the right strategies in place to achieve that goal



**52%**

report that they use their data and information to make decisions, however only

**8%**

are very confident in doing so

Relevant, quality and timely information allows organisations to make the best possible decisions. Whether it be where to send a road maintenance crew or the real-time condition of an asset, information can aid councils to ensure the projects they invest in are correct and allows to ensure ratepayers' money is used most efficiently.

In order to become efficient decision-making organisations, local governments must ensure their information is accessible, accurate, timely and reliable.

In large, complex organisations paper-based systems are cumbersome and relatively unresponsive. Organisations are increasingly looking to digitally-enabled information management to ensure business processes and service delivery are optimised and decisions are evidence-based.



The survey examined local governments' current and future plans regarding information management, including:

- strategies currently in place
- use of data-based (evidence-based) decision making
- value of data and information
- business analytics benefits realisation.

Overall, the councils surveyed recognised the potential benefits of information management and the value of data and information in the areas of strategic guidance and direction could be improved.

More than 90% of councils agreed that using information management as a tool to ensure that the information is accurate to make better decisions is important. However, only 63% of councils surveyed say they have the right strategies in place to achieve that goal.

Over half of councils (52%) report that they use their data and information to make decisions. However, only 8% are very confident in doing so. Despite this willingness to make evidence-based decisions 24% of councils surveyed are unable to find the right data to make decisions which impacts their ability to deliver efficient, quality services to their citizens.

While nearly all councils report they have room for improvement, there have been some positive improvements since the last survey was conducted in 2013.

Councils are increasingly considering information as a strategic asset, and treat it with more respect than reported two years ago.

However, more than a third (37%) don't have, or don't know if they have, information management strategies in place. Councils are also interested in exploring the benefits of advanced business analytics (59%), but will first need to establish strategic directions and ensure data availability.

#### **Insights:**

1. Councils are progressively assigning higher value to their data and information; efforts have been made in relation to the way they are treated and drive decision-making within their organisations. Some councils still struggle to find and store the right information and data to make decisions which compromises the delivery of value for money services and relationships with citizens, local business and visitors.
2. While more than half of councils understand the value of their data, only 35% have a strategy to release some data (open data) for the benefit of their community.

#### **Challenges:**

1. Improving councils' ability to manage the information lifecycle is essential to enhance decision-making, overall efficiency and quality of processes.

#### **Opportunities and actions to progress:**

1. There is clear enthusiasm and eagerness for improving information management and therefore decision-making abilities amongst Queensland councils. Leveraging best practice processes and technologies, as well as guidance and knowledge from other spheres of government could enhance councils' capabilities to provide efficient delivery of services.

# More efficient operations

The increased strain on council budgets has driven an increased need for efficiency and productivity through business operations. A key driver of that efficiency is digital technology and increasingly businesses and councils have made strategic investments in technologies which track assets, make information available when and where it's needed, and provide operational intelligence that wouldn't otherwise exist.



**59%**

Advanced business analytics



**53%**

Drones



**85%**

Smart lighting



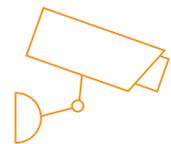
**62%**

Smart meters



**68%**

Sensors and the Internet of Things



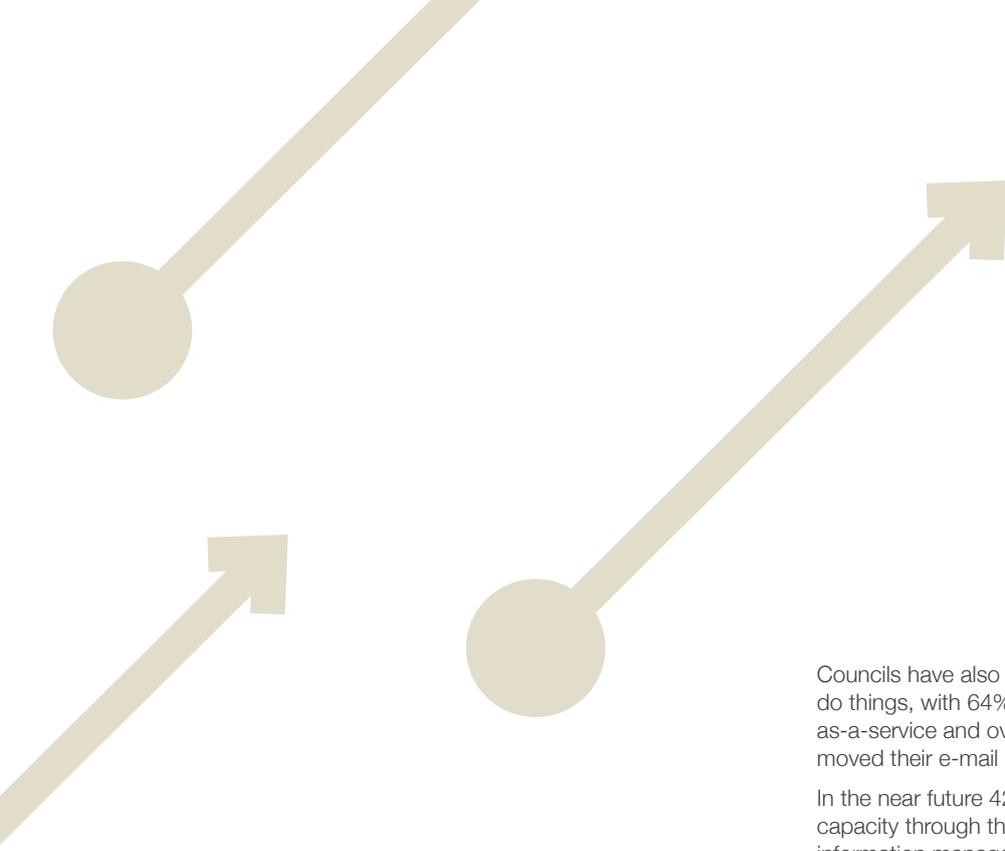
**59%**

CCTV



**79%**

Asset management, such as vehicle tracking



The survey comprised councils' current and future plans to adopt more efficient digital technologies, including:

- current priorities
- productivity measurement
- percentage of online transactions
- technology investment and direction.

Almost 60% of surveyed councils report they will be investing in business improvement projects in the next 12 months. A particular focus of those projects will be using technology to increase their operational efficiency.

While councils are particularly interested in exploring the benefits of new technologies included below, they have already invested in a number of efficiency building technologies including the development and implementation of mobile applications.

- CCTV (59%);
- Advanced business analytics (59%);
- Drones (53%);
- Smart meters (62%);
- Sensors and the Internet of Things (68%);
- Asset management, such as vehicle tracking (79%);
- Smart lighting (85%)

61% of councils have invested in applications including 47% who have a disaster and emergency mobile application. A similar number of councils responded that they have an application to allow citizens to report faults, while 41% have rolled out mobile applications for animal control.

42% of councils intend on rolling out more mobile applications in the next 12 months with planning and building, and allowing mobile payments the most popular.

While councils have made a strong start in using mobile applications to increase their operational efficiency, there is still quite a way to go, with councils reporting that they see business value in introducing apps to allow citizens and council to track water use, apply for permits and showcase their region to tourists.

Councils have also invested significantly in changing how they do things, with 64% confirming that they now use software as-a-service and over half of councils reporting they have moved their e-mail and storage to the cloud.

In the near future 42% of councils intend to purchase computing capacity through this model, while 24% intend to access information management as-a-service.

Councils' data is largely managed electronically and elements such as contact details and transactions history are increasingly being managed online; 88% and 84% correspondingly, 10% higher than reported in 2013.

Councils also feel optimistic about having a larger amount of online transactions within the next five years (around 70%), however 38% don't have current plans to achieve those predictions.

While councils are focussed on implementing this technology they do not yet have the frameworks to determine if they have been successful. For example 55% of councils are not measuring if a technological implementation was successful. This is 10% lower than two years ago, meaning those councils may be missing opportunities to leverage lessons learned and predict future investments.

Despite the improvement in success measurement, 35% of councils don't have specific targets for productivity, efficiency and performance. Moreover, it is alarming that 26% of councils don't even have measurements in place, 2% higher than reported in 2013.

#### Insights:

1. Councils are increasingly aware of the criticality of digital technologies in regard to their productivity and efficiency of services. However, they need support in strategic planning, as well as in gaining insight into the impacts of technology initiatives.
2. In comparison to the 2013 report, councils are more evenly managing their data electronically which is an indication of improved digital capabilities and positive progress toward integrated, more efficient information and data management.

#### Challenges:

1. Councils are making positive progress toward digital technology adoption, but lack clear direction in terms of strategic planning and performance indicators. More commitment from local governments is required in order to implement cost effective and low-risk technology initiatives.

#### Opportunities and actions to progress:

1. Local governments must establish clear indicators of productivity, efficiency and performance.

# Reducing costs

Councils, like many organisations, are experiencing a financial squeeze. The costs of providing their services are increasing rapidly, while the funds they receive to provide those services are decreasing. It is therefore no surprise that reducing costs remains the highest priority for councils.

The survey comprised councils' expenditure in relation to digital initiatives, and includes:

- allocation of funds
- sharing services with other governments.

Reducing costs remains one of the highest priorities for local governments, therefore initiatives such as pooling resources with other councils to get a better price or better services are greatly considered by the majority of councils (80%) – sharing data centres with neighbouring councils in circumstances where they are unable to access hosted solutions is the most sought after (44%).

Regarding funds allocation, councils will be assigning financial resources to training and development, business improvement projects and telecommunications in the next financial year.

## Insights:

1. Reducing costs remains a high priority amongst councils as shown in 2013's report.

## Challenges:

1. Proving real value of digital technologies adoption must be strategically addressed by local governments. Proven cost savings is the best example the government can set to promote digital technologies and active participation in the digital economy.

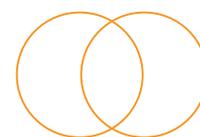
## Opportunities and actions to progress:

1. Councils should leverage their willingness to pool resources with others to get a better price and provide better services to communities – efforts should also be combined with state and federal governments, as well as private industries.
2. Council should make better use of professional services to support changes.



44%

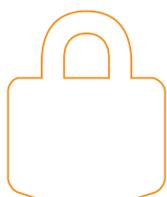
of councils are open to sharing data centres with neighbouring councils



80%

of councils pool their resources with other councils to reduce costs

# Managing risk



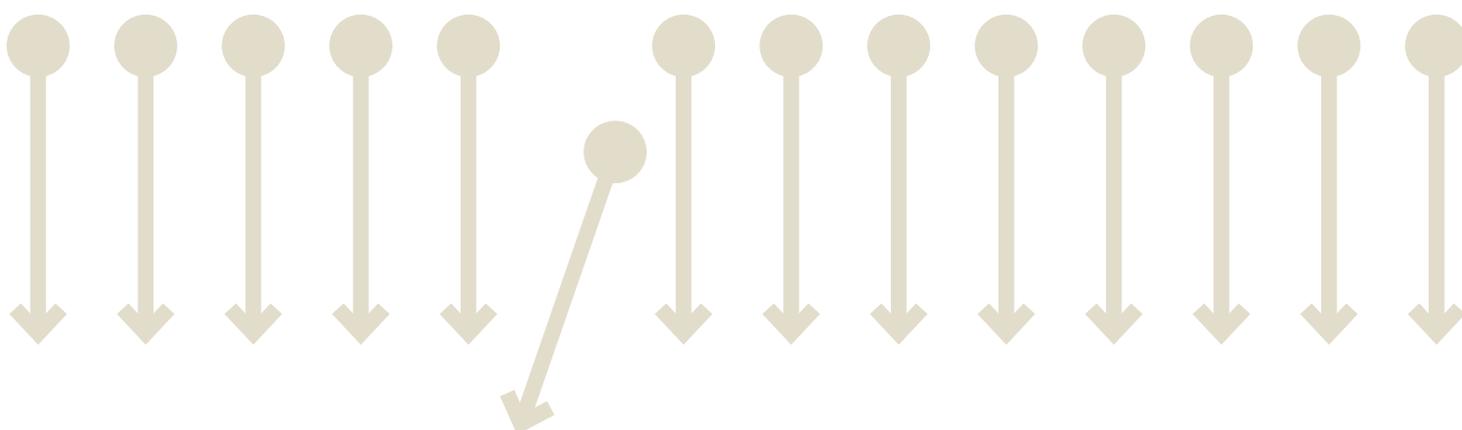
**96%**

of responding councils are confident their data is safe and secure



**92%**

are confident that their council complies with data protection and privacy legislation



A key concern for most large organisations is their exposure to the risks associated with security, protection and privacy compliance.

For organisations like councils where more than 80% of sensitive community data, billing information, transaction histories, contact details and geographical data are stored online, these risks must be managed.

96% of responding councils are confident their data is safe and secure and 92% are confident that their council complies with data protection and privacy legislation. Only 42% of councils are confident enough to report on that metric.

Responding councils are reasonably confident they meet data protection and privacy legislation requirements. More than 90% of councils reported compliance with relevant legislation, and a higher percentage (96%) ensure their data is kept secure.

It is concerning, however, that more than two thirds of councils were unable to report on how they manage these risks, given the criticality and risks of non-compliance.

## Insights:

1. There is still uncertainty regarding a large proportion of Queensland local governments meeting crucial data requirements such as security, protection and privacy compliance.
2. A high proportion of local government data is not well controlled.

## Challenges:

1. Gaining more insight into non-respondent councils is essential to capture the sector's risk posture.

## Opportunities and actions to progress:

1. Proactive approach by councils would reduce the costs and reputational damage.
2. The LGAQ should provide assistance to those councils unable to respond to address the potential compliance, reputation and financial risks.

Councils have overwhelmingly embraced digital change and are interested in continuing to mature their technological capacity in response to their business needs.

However there are a number of barriers to change, including a concern about the lack of skills, a lack of sufficient infrastructure, a lack of funds and a lack of time.

# Section 2

# Barriers to change

## Key findings

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**Over 75% of respondents thought that internet coverage and internet speed were a barrier to advancing their digital agenda, a significant increase from 2013.**



**58% of councils have experienced an inability to source appropriate and relevant technological skills.**



**A lack of funds may be exacerbated by councils not measuring the impact of their technological change to determine if long term cost savings have been realised. More than 31% of councils still do not see IT as a cost centre.**



**Most councils listed the cost of transitioning to the digital way of working as a key concern.**



**The majority of teams responsible for technological change across government comprise less than 10 people, so it's no surprise that time is a key barrier to change.**

# Skills

Research has revealed that a lack of skills is the biggest threat to the success of digital delivery. Australia's Digital Pulse report issued in June 2015 stated, "Despite the strong growth in demand, with a projected gap of more than 100,000 ICT workers in the next five years, and declining rates of ICT graduates, we are facing a serious problem."

The survey explored several areas regarding the skills of council employees. Despite 58% thinking a skills gap was a barrier to technological change, 66% are confident that their staff have the skills and willingness to help their council embrace a digital future.

Although this highlights the perception of a skills gap within the councils, the survey demonstrated that councils are looking to address this. 37 councils reported that they have tried to alleviate their skills shortages by hiring employees with digital skills from outside of council.

By conducting a skills assessment of current employees to identify skills gaps for the technology transformation, councils have the information needed to be able to consider the options to bridge this gap. This could be achieved by either educating and retraining staff or engaging outsourced technology services to support their digital transformation. Based on the responses from the survey it appears failure to employ the right level of digital expertise within their organisation is a major concern for councils.

The increase in the number of councils which perceive an overall skills shortage for the digital economy (75% up from 58% in 2013) echoes the concerns raised in the broader economy.

## Insights:

1. Councils are increasingly looking outside the local government sector to recruit digitally-skilled employees.

## Challenges:

1. 34% of councils are concerned they may not have the skills in their organisation to embrace a digital future and have identified that the availability of digital skills will be a key future problems in their organisation.

## Opportunities and actions to progress:

1. Less than a third of councils are currently ensuring their existing employees are appropriately skilled to meet the needs of the digital economy. By increasing the professional development of existing employees councils may have easier access to the skills they will require in the future without the costs of recruitment.
2. Council should make use of professional services and ensure that knowledge transfer occurs.



58%

think a skills gap is a barrier to technological change

66%

are confident that their staff have the skills and willingness to help their council embrace a digital future



34%

of councils are concerned they may not have the skills in their organisation to embrace a digital future

# Time & knowledge

Those responsible for implementing digital change within council are small teams of less than 10 people, often led by someone with broader responsibilities.

For that reason it is no surprise that these teams find it difficult to find the time to investigate, implement and manage technological change.

While almost 70% of councils find it easy to source technology to support their council's needs and leverage the knowledge of staff (61%); other councils (66%); and businesses who are using those technologies (64%) to find appropriate technologies, a lack of time to implement change on top of maintaining business-as-usual operations was cited by a large number of councils.

This was particularly evident when councils were quantifying their reasons for not yet moving their services online (almost 40%), despite being more active on social media and regularly updating websites.

The overall feeling from respondents (71%) was that training sessions/workshops, greater awareness and promotion of technology (63%) and access to online resources (47%) would assist their council to better understand the potential business benefits of the digital economy.

## Insights:

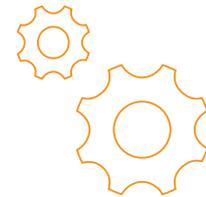
1. Few councils can afford dedicated digital transition teams.

## Challenges:

1. Small groups without a leader focussed on the implementation and management of technology will find it difficult on their own to support their councils with technological change.

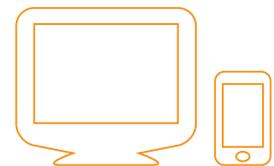
## Opportunities and actions to progress:

1. Councils which do not yet publish their forward procurement plan should consider doing so in order to better leverage the expertise of vendors in making technological decisions.
2. The LGAQ could consider providing additional support to the councils with regards to this learning by facilitating knowledge sharing and distributing educational material.



70%

of councils find it easy to source technology to support their needs



40%

of councils have not yet moved their services online

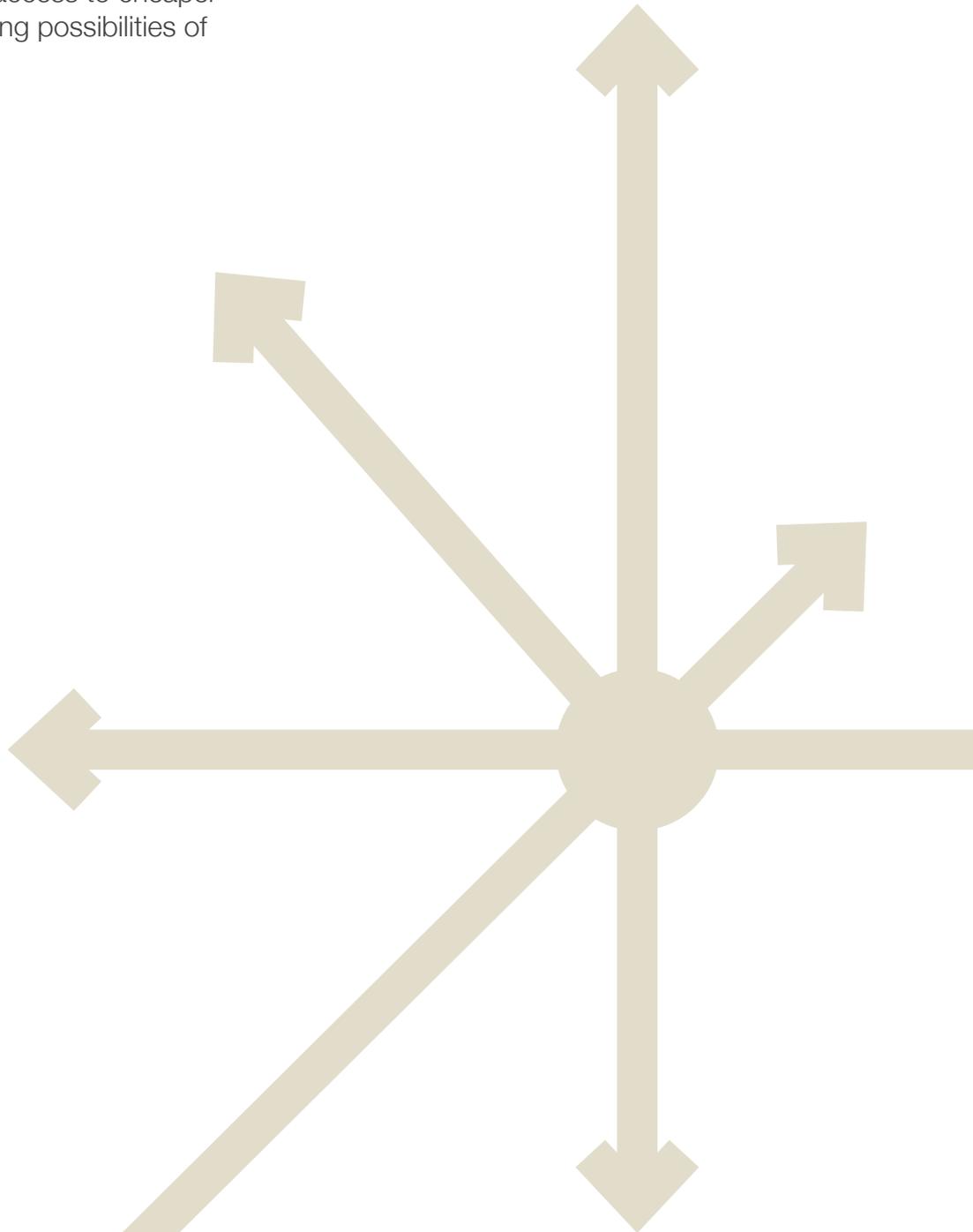
# Lack of infrastructure

Most of the future operations of councils will be underpinned by reliable communications and telecommunications infrastructure. It enables mobility solutions, access to cheaper infrastructure and the growing possibilities of the Internet of Things.



**55%**

of councils do not believe they currently have the access they require to high quality communications



Having access to the right infrastructure is a key enabler to the success of technology adoption. Although this survey did not look at the specific technology within councils, it did examine the overall perception of the current technologies within the councils and its capability to support the technological transformation.

Councils understand where the telecommunication assets are in their region, but 55% of councils do not believe they currently have the access they require to high quality communications in their region to enable technological change.

The survey posed numerous questions regarding telecommunications and the NBN rollout.

Encouragingly, the overall feeling regarding the NBN was positive with 83% of councils agreeing that the NBN is a good investment in Australia's commercial future. Positive responses with regards to the NBN – revolutionising the way they do business (63% agreed) and feeling the faster internet speed promised by the NBN will make a positive difference to their community (79% agreed) – is aligned to the overall perception held by the majority of Australian businesses.

While councils are eagerly awaiting the benefits of the NBN, only 7% of Queensland councils have the NBN fully rolled out within their area. Possibly more concerning is that over half the respondents were not aware when the NBN was going to be rolled out in their area.

There is an increasing gap between the available communications infrastructure and council's needs, with a larger number of councils indicating that their needs aren't currently being met compared to two years ago.

Over 75% of respondents thought that internet coverage and internet speed were barriers to digital business. This is a significant increase from 2013 when only 42% thought this was the case.

#### Insights:

1. Fewer councils now feel they have access to the telecommunications infrastructure they require. This is more than likely a result of the interest in more infrastructure-heavy technology like cloud.
2. There is a high interest in the capacity that could be leveraged as a result of the rollout of the NBN, however few councils are aware of when it will be rolled out in their region.

#### Challenges:

1. The lack of infrastructure in some regions, as well as the perception of the lack of available bandwidth, will continue to be a key barrier to fully implementing technology business plans.

#### Opportunities and actions to progress:

1. The LGAQ should consider developing a "hot spot" map of areas which have insufficient access to communications infrastructure to use as an advocacy tool for other levels of government and with telecommunications companies.



**83%**

**of councils agreed that the NBN is a good investment in Australia's commercial future**



**+75%**

**thought that internet coverage and internet speed were barriers to digital business**

Of the three levels of government councils have the most day-to-day contact with their community, whether it be by ensuring rubbish service delivery, the maintenance of local roads or by supporting community activities.

It is therefore extremely important that councils remain connected and in an active dialogue with their community.

Before the advent of technology this was much more difficult, with councils proactively calling community meetings, letterbox dropping community information and interacting through local media.

Services could only be accessed in person or over the phone and would often require voluminous paper-based application forms.

While these are still valid mechanisms for connecting with the community, technology has enabled councils to communicate with a broader cross-section of the community more cost effectively, and provide increased convenience for those they serve.

Increasingly these services are coming to be expected by members of the community who wish to interact with service providers like council using the mechanism of their choice, when it is convenient for them.

Councils, for the most part, also understand that moving some of their services online or accessible through digital means allows them to put downward pressure on their own costs.

Most councils are using technology including websites, social media and mobile enabled websites to provide relevant, timely information to their community, and are preparing for a future in which technological interaction becomes the norm. But there is still some significant room for improvement.

# Section 3

# Communicating with the Community

## Key findings

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**All responding Queensland councils have a website.**



**More than 80% of councils are updating their websites at least weekly, with almost 50% updating them daily.**



**44% of councils have invested in making their websites compatible with mobile devices and the majority of those have done so in the last six months.**



**While 67% of councils are conducting less than 20% of their transactions online, over 70% expect they will be delivering more than 40% of services online in five years.**



**Councils are overwhelmingly using their websites to communicate with the community (95%), advertise jobs and tenders (90%) and promoting their facilities (84%) but only 35% are using their websites to offer services online.**



**Social media is becoming an increasingly large part of council's plans to communicate with the community, although 55% of councils don't use social media monitoring tools and 56% don't have a plan to engage their community through social media.**

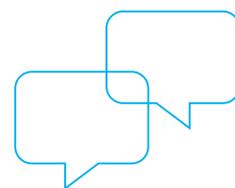
# Digital channel

Websites are increasingly providing a way for customers and citizens to not only access information but also services in real-time, at their convenience.

This change is increasingly an expectation, as customers seek relevant, timely and quality information and are coming to expect access to services at their convenience.

This 'consumerisation' of services has been led by the banking, finance and insurance industry but governments are increasingly embracing it, with the Queensland Government recently recommitting to their "One Stop Shop" initiative.

While these changes are being championed by those seeking more accessible services, a website can be a cost-effective tool to drive revenues, cut operating costs and drive meaningful citizen-related data collection.



**95%**

use their websites  
to communicate  
with their  
community

**74%**

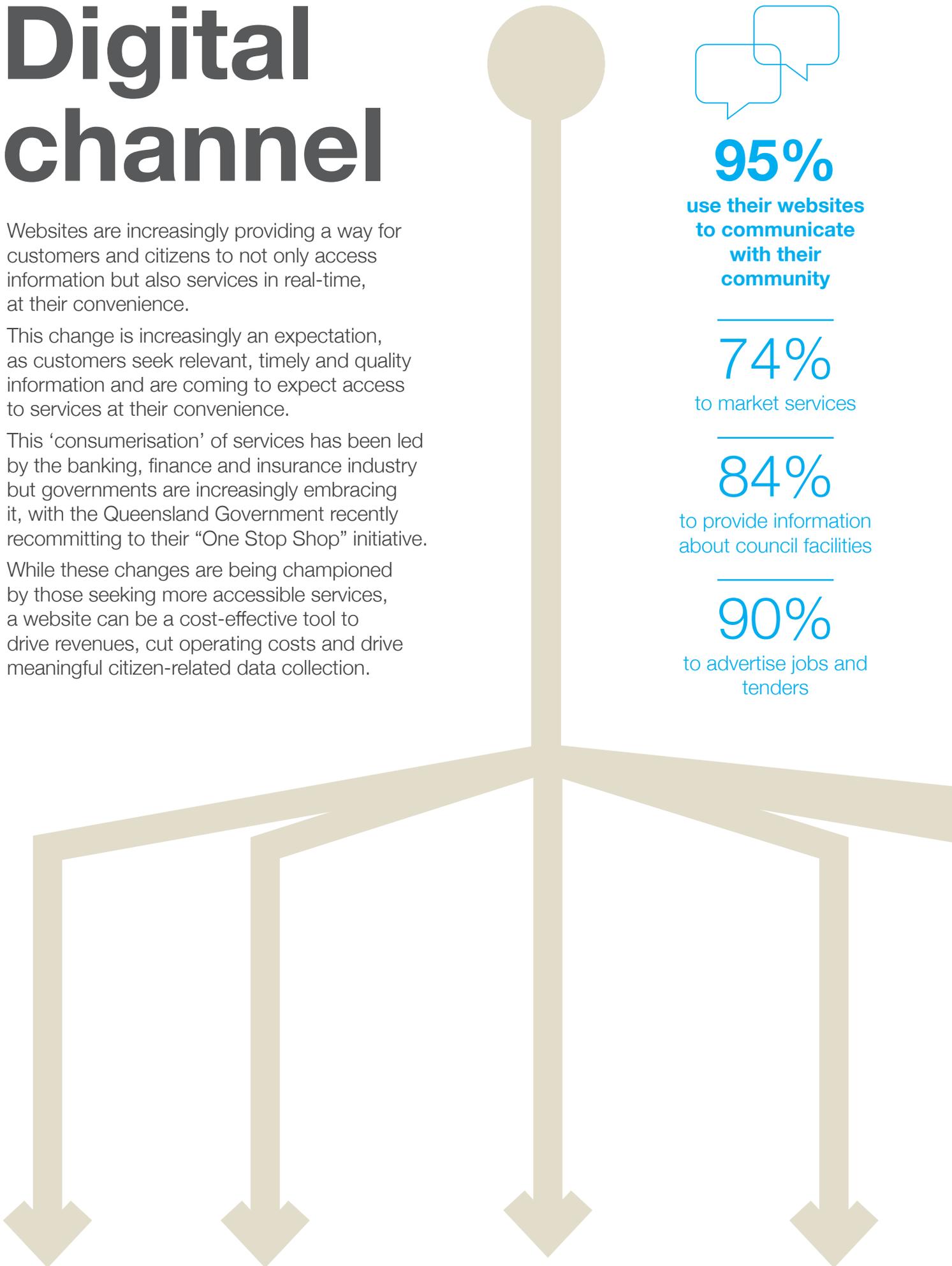
to market services

**84%**

to provide information  
about council facilities

**90%**

to advertise jobs and  
tenders



The survey reviewed the following aspects relating to web presence:

- quality of information and services offered in council websites
- the range and capability of web-enabled services they offer
- investments in web technologies to widen the scope of influence and services.

While all surveyed councils currently have a website, a number of councils have only recently made an investment in this vital technology, with 6% of councils reporting they have had a website for less than a year.

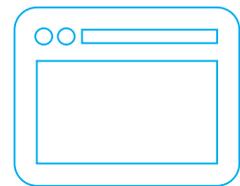
Since the last survey councils have begun updating their websites with current information much more frequently, with most councils reporting that they have moved from weekly updating of their website to daily. Some councils, however, have decreased the frequency of website updates, with a small number of councils reporting they have moved to updating their website every few months, and a small number of councils saying that their content is now largely static.

Almost all councils (95%) use their websites to communicate with their community, with 74% using their website to market council services, 84% to provide information about council facilities and 90% to advertise jobs and tenders.

Increasingly websites are being used to transact business, with 37% of councils processing online payments, 32% allowing the electronic lodgement of forms, 55% of councils permitting citizens to request services online and 66% facilitating the reporting of problems.

While these more transactional services only currently constitute between one and 20% of the transactions undertaken by councils, 73% of Queensland councils believe that between 40% and 100% of their transactions will be conducted online in five years.

To underpin this expected change, 62% of councils have a current plan to increase the amount of services they offer online.



# 62%

**of councils have a current plan to increase the amount of services they offer online**

#### **Insights:**

1. Councils have an aspiration and an understanding that more of their services should and will be available online within the next five years, but not all (62%) are currently planning for that change.
2. Council websites are starting to move from broadcasting information to facilitating a “conversation” with the community.
3. Local government is lagging in the area of online channels yet this provides the greatest digital dividend.

#### **Challenges:**

1. To ensure the success of the movement of services online, councils must plan for the move now, including determining what services they currently offer, which are suitable to be digitally enabled and which will require continuing human interaction.

#### **Opportunities and actions to progress:**

1. Councils should undertake an audit of their services and begin a process to determine which of those can be made available online.
2. Councils must keep pace with wider digital trends of conducting business online.
3. Councils should provide mobile payment options for rates and charges.

# Social media

Social media is now a key part of community conversations.

According to the most recent Sensis report into social media, almost 50% of consumers access social media every day, a figure which rises to 79% for the 18-29 years age group.

According to Sensis, 93% of social network users have a Facebook account, 28% have profiles on LinkedIn and 26% have a presence on Instagram.

Recognising that social media is both a legitimate and desirable channel of communication, councils have continued to embrace this technology. Almost 89% of councils use social media, up from 71% two years ago.

Reflecting the relative market share of each of the networks, Facebook is the most popular choice for councils with every council responding having a Facebook presence and a number of councils abandoning less mainstream social media like Tumblr and Flickr in favour of the more mainstream Instagram.

Communicating with their community is the core reason for maintaining a social media presence, with councils also using social media to communicate with suppliers (15%), research (28%) and to communicate internally (11%).

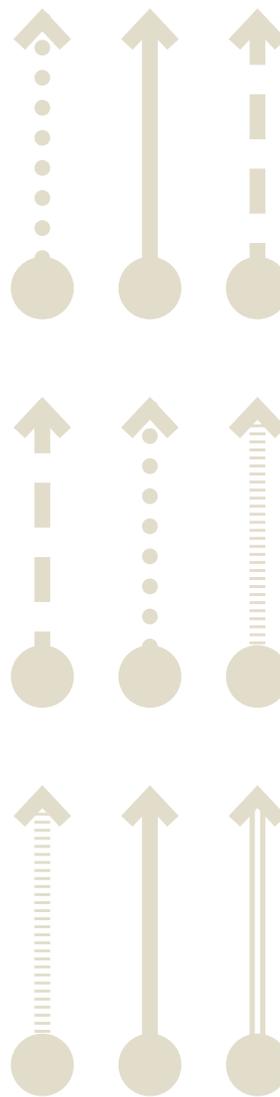
Social media can be a tool to generate community engagement and as one of the ways councils market themselves to the community. But it is also seen as risky by 85% of councils, with 63% of councils also labelling social media as another call on stretched time and resources.

To get the most out of social media and the resulting engagement with the community, councils are turning to social media monitoring tools like socialmention or Hootsuite with 45% of councils reporting making the investment.

This investment also reflects councils' increasing tendency to plan their interaction with the community through a social media strategy. Two years ago just 18% of councils had such a plan, and in 2015 almost half of councils have implemented one.

The elected council member has also embraced social media over the last two years. While 40% of councils reported that none of their councillors and mayors used social media as part of their election campaign in 2012, now 75% of councils have at least some of their elected members active on social media.

While this increased take-up by elected councillor's reflects increased expectation that brands and institutions are active on social media, councils are still growing into the role.



**89%**  
of councils use  
social media

**15%**  
to communicate  
to suppliers

**28%**  
to conduct research

**11%**  
to communicate  
internally

## Insights:

1. Social media is now a normal part of a council environment, with all councils investing in a social media presence and 75% of councils reporting that at least some of their councillors are active on social media.
2. Social media is being widely used but the value is not being exploited. Investments in sentiment analysis can produce significant savings.

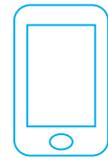
## Challenges:

1. While councils have invested heavily in a social media presence they have typically underinvested in social media planning and monitoring capability.

## Opportunities and actions to progress:

1. Councils must consider planning their social media interactions with the community and integrating social media with their broader communication plans.
2. Councils should consider investing in social media monitoring tools to ensure that they stay engaged with community expectations.

# Mobile websites



**44%**

of councils have a mobile version of their website, up from

**22%**

two years ago

People are changing the way they access information. In 2014 the number of people accessing the internet via mobile devices outstripped those accessing the internet via a desktop for the first time. By the end of this year 200 million more people will utilise handheld devices than traditional computers.

This, coupled with Google's decision to change the way it indexes non-mobile friendly sites to prefer mobile friendly websites means it is more important than ever for councils to have a mobile version of their site.

Councils are becoming increasingly aware of the need to provide mobile friendly access. Two years ago only 22% of councils had a mobile version of their website; now it's 44%. While some councils have been early adopters of mobile versions, with several councils reporting that they have had a mobile site for more than five years, most councils have invested in the last three years with a spike in the last six months.

Overall, local councils in South-East Queensland and in major regional centres are more likely to offer mobile versions of their websites to citizens. Local councils in the Indigenous Communities area are still significantly behind, and many do not offer mobile versions of their website to citizens.

## Insights:

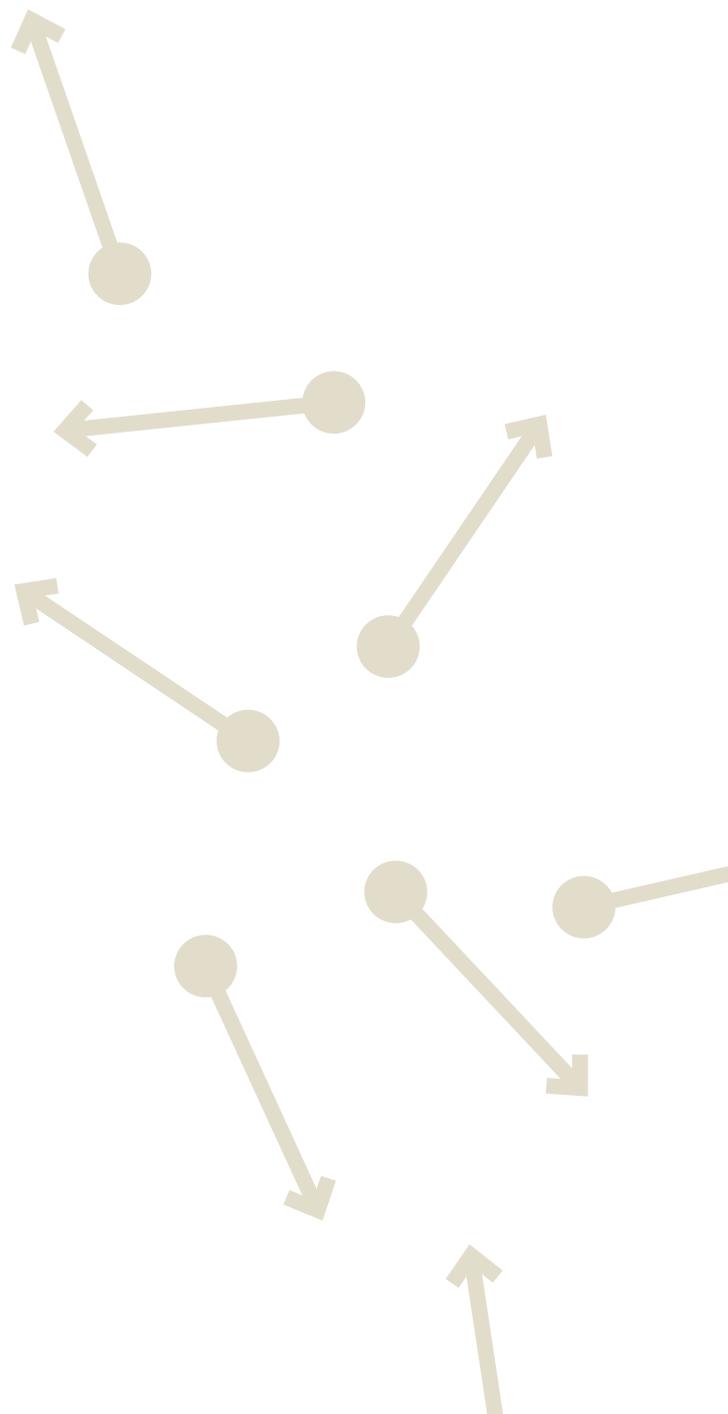
1. Councils have invested significantly in making their websites accessible to citizens who are accessing information on mobile devices.
2. The lack of a mobile website is a key barrier and must be addressed.

## Challenges:

1. Many smaller councils and those outside the South-East have not yet made an investment in making their websites accessible to mobile customers and are not as visible on search engines as a result.

## Opportunities and actions to progress:

1. Councils must consider making an investment in optimising their website for mobile use as it is more likely their websites are currently being viewed more often on mobile devices than on desktop computers.



Councils are particularly interested in exploring the benefits of new technologies including:

- CCTV (59%);
- Advanced business analytics (59%);
- Drones (53%);
- Smart meters (62%);
- Sensors and the Internet of Things (68%);
- Asset management, such as vehicle tracking (79%);
- Smart lighting (85%)

Of particular interest to councils is the use of the Internet of Things, using sensors to give councils, businesses and community members real time information about infrastructure.

Councils see business value in using sensors to manage their water assets (95%), sewerage services (92%), waste (84%), plant and fleet assets (95%), roads (87%) and even social infrastructure like parks (80%).

# Section 4

# New technologies



## Smart Meters Mackay Regional Council

Mackay Regional Council was the first Water Authority in Australia to adopt a full roll out of smart metering (hourly readings) across its full water meter fleet without subsidies. The information collected is being used to drive capital efficiencies, improve operations and transform the way council interacts with their customers.

The technology is enabling consumers and council to read meters to identify water leaks and high consumption faster. Consumers and land lords are able to find out their daily water consumption, how much their water use is costing them and set up email and SMS alerts to warn them of high consumption and water leaks within days of occurring instead of waiting for the bill to arrive.

Mayor Deirdre Comerford said council was leading the way with modern technology and providing an improved level of service to its customers.

"The data collected will also help to optimise the network and assist in making capital investment decisions."

During the last 12 months, the Automatic Meter Reading Technology has helped council identify and inform more than 4000 properties of water leaks with the average leak amounting to around 35 litres per hour per customer.

By opening up new data sources, driving improved understanding and transformation operations, Mackay Regional Council is managing the cost to provide services into the future.



## Sensors and the Internet of Things

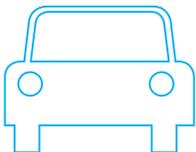
Councils across Queensland are investigating ways to connect assets to provide situational awareness. A key part of this is formulating an overarching strategy, which integrates with the communities' digital and economic plans.

Part of the process involves engagement with internal stakeholders to understand capabilities and drivers.

External groups, including businesses, education centres, local technology innovators and users, are vital in forming the strategy to ensure the technology roadmap aligns with local priorities.

A number of councils are developing Smart City strategies, including the SEQ Council of Mayors, Sunshine Coast, Ipswich, Rockhampton and numerous others.

These councils are introducing technologies including sensors, meters and monitors, resulting in new business processes which are combining to improve the productivity of the region and quality of life for citizens.



## Asset management, such as vehicle tracking

A growing number of councils are investing in vehicle tracking solutions and the results are substantial. Cairns, Longreach, Diamantina, Paroo and Murweh are part of a new wave of councils that are benefiting from improved asset utilisation and cost savings.

Cairns Regional Council's decision to introduce the machine-to-machine solution allows better management of its fleet of 600 vehicles and is expected to save \$1m in fleet costs, boosting productivity by \$3m to \$6m each year.

Similarly, Longreach and Diamantina Councils now have a better understanding of their mobile assets and are making significant savings in fuel, maintenance and operational areas, while reviewing the number of and type of assets in their vehicle fleet. The solution brings together M2M communications, but importantly easily presents data in reports that allow managers to make business decisions based on situational analysis.



## Smart lighting

The Cherbourg Aboriginal Shire Council has implemented a solution using technologies that combine smart lighting and CCTV to improve public safety and lighting in parts of Cherbourg.

The solution involves the installation of LED smart lights with Adaptive Control and CCTV on new poles that will cover key intersections and the main street in Cherbourg.

While the cameras and lighting are aimed to overcome a specific problem, the platform that has been created will allow for future expansion of the project both in terms of additional sites and additional technologies.

Using the technology to reduce the incidence of graffiti or other anti-social behaviour will help improve the liveability of the town.

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