GEELONG CAN TRANSITION TO A NATIONALLY RECOGNISED DIGITAL ECONOMY. IT WILL REQUIRE A CONNECTED, DIGITALLY EMPOWERED AND INNOVATIVE COMMUNITY WITH ENTERPRISES AT EASE IN THE DIGITAL ENVIRONMENT – AND A DIGITAL CHAMPION. THAT CHAMPION MUST BE THE CITY.

Contents

Summary of Recommendations 4
Implementation Target Areas 4
Introduction & Context 7
1.0 Drivers for Change 8
2.0 Internal Focus 12
3.0 Community Focus 20
4.0 Local Business Focus 28
5.0 Implementation considerations 36
Appendix A: Geelong WiFi Information Network 40
Appendix B: Digital Survey Results 48

Glossary of Terms

Crowd Source – In this instance it means, asking the public to provide responses and direction on specific issues or questions
Open Data – Publish information or data collected by the City, for investigation and use by the public.
Big Data – This is to do with the vast amount of information collected
ICT – Information Communications Technology
IS – Information Systems
Digital Disruption – Term used to explain how the increasing digitisation of how we do things, fundamentally changes our lives.
In anticipation of how new, emerging technologies will impact the way we all will communicate, interact and do business. The City of Greater Geelong (CoGG) has commissioned a digital strategy. This is Digital Geelong.

While the arrival of the NBN has been a spur for many areas to commission such a strategy, Digital Geelong has a broader remit. This is to ensure that the council, community and businesses of Geelong are broadband-ready and digitally enabled. That is, they have the infrastructure and connectivity, skills, capability and organisational capacity needed to maximise the benefits of digital, mobile and cloud technologies and to be successful in the emerging digital economy.

Our vision therefore is about a transformed digital council, an empowered community and a networked city confidently embracing the challenges and maximising the opportunities of the digital era. We will re-shape how we design and deliver services, how we engage with our community, how we support the economic competitiveness of Geelong and accelerate innovation and enable new opportunities for its residents.

Name
Position
RECOMMENDATIONS

INTERNAL (COGG) FOCUS

Recommendation 1: Treat staff (and the community) as part of a crowd sourced online problem solving network

Recommendation 2: The City will need to continually improve their understanding of the digital drivers in contemporary cities around the world and the role that they play in delivering Digital Geelong.

Recommendation 3: Build on the local strengths in the digital economy by embracing current and previous initiatives and their relevance to achieving alignment with Digital Geelong.

Recommendation 4: Embrace and implement Digital Geelong as a key part of an integrated growth and talent attraction strategy.

Recommendation 5: Endorse the overall strategy at corporate level and identify which directorates should lead the implementation of which recommendations

Recommendation 6: Endorse the elements of the council’s role at corporate level and identify the champion/s who will take the lead.

Recommendation 7: Develop an implementation strategy that acknowledges the organisational culture changes required to align activities with Digital Geelong.

Recommendation 8: Ensure that a cross-council process of digitisation is led by the CEO with support from the CDO or other relevant officer.

Recommendation 9: Enable staff to use their own devices at work using a ‘bring your own device (BYOD)’ platform.

Recommendation 10: Save resources by moving transactions online, as stated in the current IS strategy.

Recommendation 11: Use digitalisation to tailor and personalise the City’s services. Explore the creation of a personal ‘Geelong Account’ for online users.

Recommendation 12: Maintain the position of the leading Open Data champion in Victoria. Be recognised for providing access to all types of data sets.

Recommendation 13: Create a Geelong Data Dashboard as a platform for Open Data, for providing acute civic insight and for giving opportunities to partners and residents to read, share and use data.

Recommendation 14: Further explore the implementation of the identified opportunities in which local democracy can be re-invigorated online. Participatory budgeting should be an area of focus.

COMMUNITY FOCUS

Recommendation 15: Create a digital platform called digitalskillsgeelong (for example). The objective of the platform is that it be a one stop shop for gateway digital learning in Geelong.

Recommendation 16: Set an aspirational target of whole of community inclusion. Work with skills providers and not for profit organisations to engage/upskill key target groups.

Recommendation 17: Create a ‘Go On, Get Online’ initiative; a ‘Geelong Digital Mates’ project and a Geelong Digital Festival or Digital Day.

Recommendation 18: Exploit the opportunities libraries offer as providers of digital infrastructure and platforms for digital inclusion. In particular exploit the potential of the new central library.

Recommendation 19: Ensure the new library has the capacity, tools and approach to be a Geelong tech-hub, makerspace or fablab in the future.
BUSINESS FOCUS

Recommendation 20: Digital Geelong will continue to build on emerging clusters in health, sports science, retail, university capacity and related analytics.

Recommendation 21: The City should prioritise business support and knowledge transfer initiatives for SMEs – and target intervention to match their different ‘digital profiles’.

Recommendation 22: Use and promote a digital benchmarking tool as indicated and/or work with ICT Geelong to develop such a tool for local use.

Recommendation 23: Partner with tertiary education institutions to attract talent, develop skills – and seek to create a Research Centre for Smart Analytics.

Recommendation 24: Formally recognise that a wide variety of jobs and employment scenarios will be created in the digital economy. Ensure that partners are designing and delivering appropriate training and skills programs to service those job opportunities.

Recommendation 25: The City should maintain its brokering role on behalf of the local economy in discussions with the NBN as to its roll-out schedule and locations – and in relation to mobile services.

Recommendation 26: The City should iteratively release all relevant datasets digitally to help local business development.

Recommendation 27: The City should create local business opportunities, ‘hackathons’ and other incentives using its own and other government agency data to develop digital applications.

Recommendation 28: The City should clarify the role it wishes ICT Geelong to play as part of the digital partnership for Digital Geelong.

Recommendation 29: The City should create and chair a Geelong Digital Partnership involving all key forces required for the strategy.

Recommendation 30: Using the Intelligent Community Forum criteria as benchmarks, seek to establish Geelong as a global Top 21 Intelligent Community by 2019.
INTRODUCTION AND CONTEXT

The City has commissioned Digital Geelong to ensure that Geelong Council is a leader in engaging with and serving its community and businesses in whatever channel they wish to use – face to face or digital. A key aim is to maximise the efficiencies and benefits available from digital technologies – at a time of pressure on public finances – to deliver even more value for money and impact to Geelong.

This strategy document is a generative and thought provoking piece that will serve as a reference for Geelong’s digital direction over the coming decade. The City of Greater Geelong needs to achieve strategic alignment with all business units before many of the recommendations can be implemented. Implementation activities will be clear, flexible and collaborative, but need to follow the agreement of a digital direction. That direction is contained in the following pages and the activities that preceded it.

The recommendations that are grouped on the previous pages are presented with the context that they relate to for easy navigation and transparency.

DIGITAL DISRUPTION

All our ‘business models’ – how we do business, how we engage with and serve customers, clients and residents and how we operate – are being disrupted and transformed in the digital era, whether you are in the public, private or not for profit sectors.

Driven by internet-enabled convergence, we are now seeing even greater transformation than we have experienced to date. Content, data, people, businesses and places are now connecting in new ways to deliver dramatically new applications, services, experiences and markets and the very way we manage our economies, our cities and our public services.

BIG DATA

With the ‘internet of things’ we are entering a world of Big Data when sensors in infrastructure or GIS monitoring produce real-time information on such things as the use of public transport, congestion, noise levels, availability of parking spaces, road closures, or energy usage. Cities themselves are becoming networks producing data on city performance – city analytics – which citizens will increasingly wish to access and which city governments will increasingly need to use to shape their operations, to manage their cities more effectively and exploit their opportunities.

EMPOWERED ONLINE CONSUMERS – BUT STILL THE NEED FOR DIGITAL INCLUSION

This will come as no surprise to many in our community whose own experiences have been radically changed by digital technologies. Such technologies are empowering consumers and transforming the market-place for businesses of all kind whether they are in retail, manufacturing or professional services.

The pressures to provide empowered consumers with the services and products they want, when they want them and where they want them, 24/7, are now leading to a re-design of public services around the consumer experience. The best councils are re-shaping how they engage with their residents and businesses both in designing effective services and in delivering them. Expectations are rising and Geelong wishes to meet or indeed exceed them.

The City of Greater Geelong needs to understand how digital is changing its business model and iteratively redesign services and engagement.

However, as technology changes, significant disparities in access and opportunity are emerging. Unless this is remedied the digital divide will be truly entrenched by the end of the decade. Determined that all in the community must benefit, Digital Geelong has ‘digital inclusion’ at its heart. The City will work with partners from the public, not for profit and private sectors, to ensure our community and business have the skills and infrastructure required to participate fully in the digital era.

Digital inclusion is at the heart of Digital Geelong.
1.2 RESIDENTS AS PART OF THE NETWORK: CROWD-SOURCING AND SHARED PROBLEM SOLVING

But we must also recognise that the best organisations going forward into the digital era see their users/residents as an essential part of their network. This is a key bonus of digital. As commercial and public services move more and more online, so grows the capacity of those who are connected and skilled to engage with service providers and derive better outcomes. Better relationships between council and community can develop. Crowd-sourcing policy innovation, shared problem solving and more instant feedback loops with the public will improve the quality as well as the cost-effectiveness of services.

Digital platforms and social media – with their reach, accessibility, immediacy and ease with which content can be disseminated - allow far more people to contribute to solving a problem, which means potentially far greater efficiency and effectiveness overall. This amounts to a fundamental form of business process reengineering in which citizens and clients take active parts. This also means the City of Greater Geelong can become ‘smarter’ and learn from customer feedback in a more systematic way, helping the council to deliver better and design services that are more relevant to the needs of our citizens.

This is thus not a marginal strategy for the Council but core to its objectives. Digital Geelong is positioned to support the Council’s strategic aims while putting the customer / citizen at the centre of the services we provide.

Recommendation 1: Treat staff (and the community) as part of a crowd sourced online problem solving network.

1.0 DRIVERS FOR CHANGE

- Maximising service efficiency, civic insight and innovation
- Residents as part of the network: crowd-sourcing and shared problem solving
- From e-government to we-government and the economic future of Geelong
- Start from our strengths
- Geelong well placed – with the right strategy
- A timely strategy

1.1 MAXIMISING SERVICE EFFICIENCY, CIVIC INSIGHT AND INNOVATION

The City of Greater Geelong will be a leader by adopting world’s best practice in developing new methods of communication. This will drive major efficiencies and cost savings to current communication and transaction methods.

We will also be making the most of new digital platforms and social media, trying to understand how to listen better to the community of Geelong and the best ways to harness the information people give us. The civic insight that will in the digital era become available to the Council – whether from its own operations or the information provided by its service users in the community, business and other partners – can, if properly managed, enable the Council to not simply improve its own performance but also that of the city itself.

Digital Geelong is about a different way of doing things – social media is one part of that but the underlying change to systems, working practices, understanding and culture is the key. We recognised early on in developing our digital strategy – and it’s what staff told us in our survey – that setting it within the transformation / culture change agenda of the Council was key to success.
Just as a community where the great majority are digitally literate and included has the resilience and skills to face the future confidently, so too must our enterprises be similarly digitally enabled if we are to reinforce existing strengths, innovate in key sectors, attract new entrepreneurs and, together, take our city’s economy forward decisively.

Digital Geelong thus envisages the Council as a leader and advocate for change, an innovator and entrepreneur in digitising its own services and engagement with its community – and the democratic renewal which that can bring – a champion of digital inclusion, a robust and creative supporter of local business promoting the skills, knowledge and infrastructure required to exploit the digital economy, an effective creator of the partnerships needed to deliver Digital Geelong – and as a marketer of Geelong as a networked community and as ‘the competitive edge’ of Melbourne, ripe for new start-up initiatives and the relocation of talent.

Recommendation 2: The City will need to continually improve their understanding of the digital drivers in contemporary cities around the world and the role that they play in delivering Digital Geelong.

1.3 FROM E-GOVERNMENT TO WE-GOVERNMENT AND THE ECONOMIC FUTURE OF GEELONG

It’s about public service efficiency and innovation, individual and community empowerment and democracy itself in an interactive era. We will use all opportunities provided by digital media and high speed broadband to increase the capacity of our citizens to communicate with us and with one another, to share key data, to open up access to both policy development and the political process and to work with us to deliver better services and outcomes. For Geelong, this is not just about e-government. It’s about ‘we-government’.

It’s also about the future of Geelong as a diverse and flourishing digital economy and the role the Council can play. We will support local businesses and our community to meet the challenges of, and exploit the opportunities of digital technologies and the digital economy in the broad sense defined by the Federal Government as being ‘the global network of economic and social activities that are enabled by information and communications technologies, such as the internet, mobile and sensor networks’.
1.4 START FROM OUR STRENGTHS

In making this journey to Digital Geelong we don’t start with a blank page. There is already momentum and we start with some great strengths, though we are not complacent about the need, urgently and decisively, to build on them. Our strengths are:

- The City itself is undergoing renewed dynamism and is embracing social media channels to communicate out both to local constituents and the broader public on news and issues.
- The economic development work of the Council has been recognised by the Victorian Parliament as leading edge in the state particularly in its commitment to partnering between the public and private sectors, to collaboration between councils, the state government and other parts of the public sector, and to embracing the regional economic dimension.
- That collaboration has already helped secure important initiatives such as enhanced Wi-Fi capacity in a key location in Geelong city centre, with capacity for further expansion and a highly relevant G21 review of regional digital challenges and opportunities in partnership with ICT Geelong, itself evidence of the increasing local engagement of both the private and public sectors with the digital economy.
- The installation of pit and pipe infrastructure at the Geelong Ring Road Employment Precinct and the expansion of the Central Geelong CCTV and fibre network.
- Further new impetus to local digital capacity and knowledge transfer will be provided by the new city library complex at the heart of Geelong.
- Geelong is already a locus of significant digital innovation in the private sector with the region being home to the Australian headquarters of retailers Target Australia, Cotton On, RipCurl and Quiksilver they employ more than 300 people in some form of ICT capacity.
- The work being done on tele-health and the re-design of services to patients in the digital era by Barwon Health, a recognised leader in the adoption and implementation of electronic and digital platforms is of state and indeed national significance. Health is a strong sector in Geelong and one increasingly promoting the use of digital media and innovation.
- There is a strong Medicare Local – playing an important role in creating a highly integrated local health system (important in collecting data across the health sector), and in increasing digital adoption across health providers.
- There is also increasing research strength across Deakin University & CSIRO with health-based digital applications – resulting in multiple faculties and research centres locally with health digital/ health analytics expertise.
- The presence of new and/or significant health stakeholders – this includes the headquarters of the TAC, DisabilityCare, National Disability Insurance Association (NDIA), Work Cover/Worksafe, GMHBA and the South-West Alliance for Rural Health (SWARH), and the future Epworth Hospital.
- ICT Geelong’s focus on building capability in wearable sensor technologies is also a focal point for future R&D and commercialisation activities with health applications. And not just health as the establishment of the Australian Sports Technologies Network locally indicates.

Recommendation 3: Build on the local strengths in the digital economy by embracing current and previous initiatives and their relevance to achieving alignment with Digital Geelong.
1.6 A TIMELY STRATEGY

The strategy is also timely. All local government areas across Australia are reviewing their resources and delivery approaches in order to ensure continued value for money and impact at a time when public budgets will be under pressure. Such a review of resources, organisational capacities, capabilities and structures and how we deliver our services, and seek to identify efficiencies from digital working, go hand in hand. There’s never been a better time for a Council – and its key partners -to be strategic about digitalisation. That is also the view taken by the staff surveyed for this research and as they are a key delivery tool for the strategy, this matters.

1.5 GEELONG WELL PLACED – WITH THE RIGHT STRATEGY

So, while some of the headlines for Geelong have been about challenges to its manufacturing economy, other key trends point to a future of expansion and innovation in key knowledge economy sectors – with government departments relocating to the area (TAC and WorkCover), a fast developing tertiary education presence (Deakin in particular) and some leading edge digital enterprises flourishing in the area – and to a highly positive scenario for population growth. With Melbourne itself set to be the biggest city in Australia over the next 25 years (according to the ABS), Geelong is clearly well placed to exploit that growth along with its own anticipated demographic uplift. To turn opportunity into delivery requires a strategy and a program of actions to develop Geelong’s digital assets as part of a broader growth and talent attraction initiative.

That strategy is Digital Geelong.

Recommendation 4: Embrace and implement Digital Geelong as a key part of an integrated growth and talent attraction strategy.
INTERNAL/EXTERNAL FOCUS

THE ROLE OF THE CITY

A new kind of council is emerging in response to digital media and the new culture of public deliberation and active citizenship enabled by new technology. All councils will increasingly need to – and be seen to – co-innovate with residents and act not through isolated departments but as genuinely integrated organisations. The City of Greater Geelong will seek to lead by example in the implementation of integrated online services and the promotion of digitally enabled community engagement with and for its citizens – as well as develop its staff capacity and capability to deliver this. It will build partnerships with all tiers of government and other key partners with local businesses, education providers and the voluntary sector to deliver the aims of the strategy. These partnerships will be key to one of the biggest challenges of the new era: digital inclusion.

At the heart of the Geelong suite of strategies to leverage these opportunities and attract the investment and talent – the people and capital – the city needs, will be Digital Geelong. Based in a Council-led initiative to create a ‘digital partnership’ that engages all government tiers, the public, and private and not for profit sectors, the Council’s own staff, and above all the local community, the strategy aims to:

- Improve the design, economy, efficiency, effectiveness and responsiveness of Council services
- Improve engagement with the community and business and the very functioning of our democratic process by using new digital platforms
- Identify the core roles of the Council in promoting the digital economy in Geelong – leading by example as a service provider, as an advocate for the local community and as a partnership-builder
- Identify the role to be played potentially by partners and collaborations between public, private and not for profit organisations
- Use urban informatics and city analytics to improve the performance and operation of the city itself
- Open up local business opportunities from open data initiatives
- Diversify the local economy to make it more resilient and forward-looking
- Support innovation in existing enterprises while adding to the ecosystem and infrastructure to spark new local start-ups
- Contribute to faster growth, new jobs and competitiveness
- Ensure that the digital infrastructure and networks are in place to secure our ambitions
- Help nurture the skills and mindset to enable local communities and businesses to take part successfully in the digital economy and maximise benefits from digital technologies: digital inclusion is a core aim of the strategy
- Enhance the reputation of Geelong as a collaborative, connected, dynamic and innovative city with empowered residents, businesses, learners and workforce and
- Be an essential part of the wider strategy to retain and attract the talent and investment Geelong will need

Recommendation 5: Endorse the overall strategy at corporate level and identify which directorates should lead the implementation of which recommendations

There are seven elements in the Council role that are explained in detail in corresponding sub sections. The City will be:

- A digital leader and advocate for change – new ways of working by staff and with the community
- An innovator and entrepreneur in digitising its own services and engagement – and the democratic renewal this can bring
- A champion of digital inclusion – fostering digital literacy with a leading role for our innovative library services
- A robust and creative supporter of local business promoting the skills, knowledge and infrastructure required by SMEs and local retailers to exploit the digital economy
- An effective creator of the partnerships needed to deliver Digital Geelong. To get the maximum economic and service benefits from digitisation requires planning and leadership from all tiers of Government in collaboration with the not for profit and private sectors. This Council will seek to be at the heart of the collective effort by bringing together all the forces required to deliver the strategy and maximise its impact in a Geelong Digital Partnership.
- A coordinator of the urban renewal of Geelong with integrated digital initiatives and a talent attraction strategy to create an innovation and tech savvy eco system at the heart of a renewed Geelong
- A marketer of Geelong as a networked community and as ‘the competitive edge’ of Melbourne, ripe for new start-up initiatives and the relocation of talent.

Recommendation 6: Endorse the elements of the council’s role at corporate level and identify the champion/s who will take the lead
PRINCIPLE 2/
THE CUSTOMER IN CONTROL

Ensuring in the way information and services are made available that the customer is always in control, maximising transparency and self-service where possible. This will require careful organisational change initiatives, which are already under way in some areas of CoGG.

A major benefit of the digital revolution is that it makes it possible for individuals to access their own data and records and to select services to meet their needs, at times which suit them.

Well-designed web services can provide customers with personalised information and enable them to request services, report issues and undertake transactions online simply and quickly.

Understanding our customers’ needs and designing web services around the customer journey are key to delivering the right digital services.

Customer transactions are increasingly designed to be undertaken online. Wherever possible this should be fully automated, and with simple, intuitive interfaces from the perspective of the customer. Transaction examples include placing an order or making a purchase, making a payment, registering a complaint, and reporting a problem. We will overall be tailoring more online services and content so they work better on mobile phones and devices.
PRINCIPLE 3/
DIGITAL BY DEFAULT

Accelerating the move to a ‘digital only’ delivery where possible, though reflecting the needs of different groups and allowing for choice – while balancing efficiency with service quality.

Embracing digital channels as the default in service design where possible will help to stimulate both opportunity for and benefits to service users and enable overall public service innovation.

**Opportunity and benefits:** enabling individuals and communities to take more control of their lives, giving access to online data and services to improve productivity, work-life balance and education for all.

**Public service innovation:** Geelong will actively seek a channel shift strategy based on well-designed services which put customers in control and reduce costs, but must continue to facilitate offline services and support those who are not online to ensure they can access every service.

The City will further develop its Customer Access/Experience Strategy to support the current IS strategy. Customer access will include a Web Self Service Programme, and will aim to provide web services designed around the customer to deliver services in a cost-effective way and through an appropriate choice of channels. A growing list of services will be provided through our self-service program or portal, giving residents a secure, easy-to-use method for accessing local services, personal information and transactions from PCs and mobile devices. Such a portal could work in future together with the Council’s website.

To promote effective digital services shift Geelong will establish a Customer Access / Experience Board to oversee customer access activity across the organisation, ensuring maximum join-up within the Council and with partners. The Customer Access Strategy will continue to develop web self-service at its core, while providing a solution to those who can’t access digital channels directly. And we will pursue the development of a personalised Geelong Account for residents to use and track council service delivery and communication.

The City is committed to providing easy-to-use, trusted and flexible information and transactional services that support our ‘digital by default’ and online customer relationship management approach. The data obtained from the interactions with the public will, subject to privacy protocols, inform the use of next generation business intelligence, analytics and – increasingly important to enable the public to understand the data easily – visualisation tools across all front line services, to drive even higher performance.

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PRINCIPLE 4/
GEELONG PUBLIC SERVICES TOGETHER – SHARING INFORMATION ON A COMMON PLATFORM

Geelong will seek to work with other public sector partners to ensure public services collaborate as much as possible to share insights and where possible, technology and services, making services more efficient for the taxpayer and more joined up for the service user and coordinate impact in the area. Over time, the aim is to increase the publication of relevant data sets for public access across all levels of government.

**Digital Geelong** will lead to more council data being made available online. This includes publishing information about public service activities and plans. A key aim is to enable customers and residents to understand the reasons for decisions we take, by making the evidence that supports them more readily available. As well as improving trust in public services and the democratic process, over time this ‘Open Data’ approach should also reduce the administrative burden of dealing with specific information requests.

2.2 THE ROLE OF COGG STAFF

We will, with our innovative staff, develop new ways of working in the digital era, leading by example through the transformation
of our own services. While we will ensure all in the community and business can access the same quality of services ‘offline’, we will be an effective advocate for digitisation. In taking this position we are aligned with our staff.

The council staff surveyed have a clear and positive view of the potential of digital. The majority see digitalisation as having the capacity to help the Council to deliver better services, with greater impact at lower cost. Simply, they see it as having the power and potential to transform service delivery, as enabling staff to work flexibly and ‘on the move’ and as the basis of intra-council collaboration between departments enabling a more ‘joined-up’ government approach.

Moreover, they see ‘digital’ as a potential win-win for residents as well as staff – helping the interaction between both. Digital is seen as facilitating access to powerful data, which if properly managed will aid decision making and help the council to better understand and respond to the customers or local residents.

And staff see its full potential not just in relation to communication but the impact it can have on service design, delivery and corporate transformation. As one staff member put it: ‘this is about the coming together of ICTs, process design and delivery, data, customer service and engagement’.

Although barriers to success were identified such as cost, current organisational culture, lack of skills and the existence of legacy ICT systems, staff stressed the need to overcome unwillingness to change: they see that moving towards the digital future requires cultural change first and foremost to make the best use of technology in the design and delivery of services, as much as, if not more than, investment.

The commissioning by The City of such a strategy was considered timely and necessary by staff. However, staff stressed the strategy needed to be part of a process of top management-led internal engagement and awareness-raising about the possibilities and potential of digital for changing the business processes of the various service delivery departments of the Council.

Digital activity must be seen as being an essential cross-cutting part of the council’s transformation agenda – supporting the organisation’s strategic aims and recognising the benefits of whole council engagement to meet customer / citizen demands and organisational needs. This agenda is as much to do with people and culture as it is with technology. It’s about a new mindset and ways of working. It’s about enabling people to do new things and staff to collaborate to solve problems, be more productive, be more engaged in co-producing innovation- and more empowered. Enabling a collaborative style of working through digital platforms will help staff to develop ideas, share thinking quickly and tap into existing experience which is more efficient.

Participation is crucial. Digital services are still services – you need to understand provider and consumer needs to design them well. So staff must help design the change, which will help overcome the barriers to communication. And that also means there is an opportunity to work with frontline staff to help inform (and get buy-in) to service re-design opportunities. Some staff suggested the creation of a new senior post of ‘Chief Digital Officer’ (or similar) at director level, responsible to the CEO, to oversee the integration of digital across the the City’s activities.

Recommendation 7: Develop an implementation strategy that acknowledges the organisational culture changes required to align activities with Digital Geelong.

Recommendation 8: Ensure that a cross-council process of digitisation is led by the CEO with support from the CDO or other relevant officer.
STAFF WANT THE OPPORTUNITY FOR AGILE WORKING

Staff are attracted to the involvement and re-design potential that digital tools and social media give them – not least of which in their own working environment. Digital and the shift from PCs to mobile devices, offers a real opportunity for more flexible and agile working, enabling City of Greater Geelong staff to operate efficiently from any location and on the move. This enables staff to be based out in the community and indeed work from home or other locations.

The optimum results will be achieved by secure, ‘any-device, any-platform’ access, to enable staff to use personal, and non-CoGG devices – and agreed social platforms – so they can collaborate and work efficiently, and access customer information from wherever they are working. A ‘Bring Your Own Device’ scheme – subject to protocols – should be encouraged to allow staff the opportunity to use their personal devices securely at work. Enabling such a relaxed and a collaborative style of working through social platforms will help staff to develop ideas, share thinking quickly and tap into existing experience which is more efficient. These ideas are reflected in the recent transitions of successful organisations: Yarra Valley Water Victoria, Commonwealth Bank Sydney, Goodman Sydney, KPMG Brisbane.

We can take advantage of the consumer revolution making it possible for any personal device to securely connect and use Geelong’s systems and data. This means that staff can work with the equipment of their choice saving the Council having to refresh equipment – potentially very cost-effective. Digital is about now as well as the future.

**Recommendation 9:** Enable staff to use their own devices at work using a ‘bring your own device (BYOD)’ platform.

2.3 THE CITY OF GREATER GEELONG APPROACH

2.3.1 AN INNOVATOR AND ENTREPRENEUR IN DIGITISING SERVICES, ENGAGEMENT AND DEMOCRATIC RENEWAL: THE CITY OF GREATER GEELONG APPROACH

The key foundation of the transformation of Geelong into a digitally-enabled council is the digitisation of services and transactions to offer a new level of service that is more customer-centric, accessible and provides opportunities for financial savings.

The journey is towards what might be called multichannel customer experience management and the greater use of insight analytics to inform service design – and the people, process and technology underpinning this. The City of Greater Geelong is already on this journey, which is not just about technology, but about customer-driven business design, data exploitation and reducing costs while increasing efficiency. The aspiration is to be the first platform-based, digital and genuinely data-driven council in Victoria.

We will be shifting delivery where possible to a ‘digital by default’ model, to reduce costs and improve services. Delivering services online has the potential to significantly reduce costs. In Geelong we estimate that face-to-face transactions can cost up to $14.04, telephone transactions $3.20 and online less than 30c. Moving transactions from expensive channels (e.g. face-to-face) to cheaper channels, that are easy to use, will save money and enable us to target resources at front-line services. More mobile working will enable a significant reduction in our overheads, including accommodation costs, as staff are able to work in virtual teams, at home or on the front line.

**Recommendation 10:** Save resources by moving transactions online, as stated in the current IS strategy. Encourage flexible working both inside the organisation and within local business.

We will design our digital services around our communities and individuals ensuring a more personalised service. We will create a Geelong Account which can personalise services so it is possible for residents to track the progress of applications and correspondence with the Council as well as receiving proactive alerts and reminders when, for example, a parking permit is due for renewal or a development application is made.

**Recommendation 11:** Use digitalisation to tailor and personalise the City’s services. Explore the creation of a personal Geelong Account for online users.

2.4.2 THE CITY OF GREATER GEELONG APPROACH

2.4.2.1 AN INNOVATOR AND ENTREPRENEUR IN DIGITISING SERVICES, ENGAGEMENT AND DEMOCRATIC RENEWAL: THE CITY OF GREATER GEELONG APPROACH

We can take advantage of the consumer revolution making it possible for any personal device to securely connect and use Geelong’s systems and data. This means that staff can work with the equipment of their choice saving the Council having to refresh equipment – potentially very cost-effective. Digital is about now as well as the future.

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2.3.1 AN INNOVATOR AND ENTREPRENEUR IN DIGITISING SERVICES, ENGAGEMENT AND DEMOCRATIC RENEWAL: THE CITY OF GREATER GEELONG APPROACH

The key foundation of the transformation of Geelong into a digitally-enabled council is the digitisation of services and transactions to offer a new level of service that is more customer-centric, accessible and provides opportunities for financial savings.

The journey is towards what might be called multichannel customer experience management and the greater use of insight analytics to inform service design – and the people, process and technology underpinning this. The City of Greater Geelong is already on this journey, which is not just about technology, but about customer-driven business design, data exploitation and reducing costs while increasing efficiency. The aspiration is to be the first platform-based, digital and genuinely data-driven council in Victoria.

We will be shifting delivery where possible to a ‘digital by default’ model, to reduce costs and improve services. Delivering services online has the potential to significantly reduce costs. In Geelong we estimate that face-to-face transactions can cost up to $14.04, telephone transactions $3.20 and online less than 30c. Moving transactions from expensive channels (e.g. face-to-face) to cheaper channels, that are easy to use, will save money and enable us to target resources at front-line services. More mobile working will enable a significant reduction in our overheads, including accommodation costs, as staff are able to work in virtual teams, at home or on the front line.

**Recommendation 10:** Save resources by moving transactions online, as stated in the current IS strategy. Encourage flexible working both inside the organisation and within local business.

We will design our digital services around our communities and individuals ensuring a more personalised service. We will create a Geelong Account which can personalise services so it is possible for residents to track the progress of applications and correspondence with the Council as well as receiving proactive alerts and reminders when, for example, a parking permit is due for renewal or a development application is made.

**Recommendation 11:** Use digitalisation to tailor and personalise the City’s services. Explore the creation of a personal Geelong Account for online users.
2.3.2 FROM OPEN DATA TO THE GEELONG DASHBOARD: FROM CIVIC INSIGHTS TO DEMOCRATIC RENEWAL ONLINE

Open Data can include all kinds of data sets that the Council releases including research, economic data, demographic trends, service performance data and analytics, and indeed city-performance data obtained from a number of sources including, increasingly, sensors in infrastructure and, subject to protocols, mobile phone data: so called ‘Big Data’. As we see in the section on SMEs, such Open Data can be highly useful to local business as well as enhancing council transparency and accountability.

_Digital Geelong_ commits the Council to being one of the most advanced and innovative exponents of Open Data in Victoria to improve accountability for performance, to enable data experts or ordinary citizens to develop public information services or applications to help citizens make informed choices, to provide important civic insights into the progress of the city itself and to promote economic opportunity. It is noted that CoGG has released a large number of datasets which is a springboard for further data release – the information released is across the whole spectrum of Council collected data.

It is also a fundamental part of the re-invention of the democratic process – helping to re-engage the community with local government and the decision-making process and indeed to make that process one of collaboration and co-production – which online activity is enabling and with which Geelong wishes to be associated.

So Geelong will have a conscious policy of releasing data it already collects but hasn’t previously made publicly available. It will progress this initiative through a modern open data platform and sharing Application Programming Interfaces (APIs) to enable developers from the community and business, producing online systems, to link up with Council systems and provide useful applications for the public.

The data will be released in machine readable form on an open source website with clear policies on reuse. The next stages are as important. Geelong will invite other public bodies/State government departments with whom we have a relationship to upload their static data relevant to Geelong in machine readable form.

Over time we will encourage anyone in the data market (transport authorities, utility companies) to join our data ecosystem because of the benefits to them, the citizen/user and the city – and then we will use our website to point to their open API's. From the start users in the community – university, TAFE, SMEs, health providers (health and public health being areas where big benefits will accrue from sharing data) and residents – should be encouraged to share and link up data sets about the local area: a ‘Geelong in Numbers’ approach.

Not only will citizens benefit from access to data, CoGG will start to benefit with datasets being released by other organisations and links being uncovered. CoGG needs to be in a position to take advantage of this as it happens.

This will be the Geelong Data Factory or Dashboard – a unique platform for private, Council and other public sector organisations to publish their open data sets online. We will aim to lead Australia in having the largest number of data sets available online and show the transformational things that can happen when a whole city shares its data, enabling a ‘Geelong 360 Civic Insight’ for residents and business which no other regional city currently can achieve. And with everyone on the same page, it is easier for council and state government staff, motivated citizens, and local organizations to collaborate more effectively to improve the quality and value of their city and its various precincts.

**Recommendation 12:** Maintain the City’s position as a leading Open Data champion in Victoria. Be recognised for providing access to all types of data sets.
2.3.4 ‘PUSH’ AND ‘PULL’ TO MAKE THE PLATFORM A SUCCESS

The ‘push’ is to provide the supply of data through the platform. The ‘pull’ is to attract in the local developer/coding/data analytics professionals/SMEs through ‘hackathons’ that help create better applications for and uses of the data, and through the potential marketing of their products (see more on this in the section on SMEs). The ‘pull’ should also be to encourage special interest groups or local clusters to explore what existing public datasets can be used and combined to provide new insights, savings or prototypes reflective of Geelong’s needs: an opportunity perhaps to have a strong health or sports science input into the Open Data platform and the development of applications.

But attention must also be given to promoting the skills, knowledge and support people need to use data. This will partly be enabled by the design of the platform itself which must be easy to access and use but also the management of the platform encouraging learning and interaction. Basically there is a need to ensure not just ‘Open Data’ but ‘opened data’. (More will be said about this in the section on ‘digital inclusion’.)

And of course this whole exercise must command top level corporate endorsement. Support from senior managers makes the difference and liberates the potential of staff to develop this project and to release more and more data by default.

Recommendation 13: Create a Geelong Data Dashboard as a platform for Open Data, for providing acute civic insight and for giving opportunities to partners and residents to read, share and use data.
2.4 FROM OPEN DATA TO OPEN GOVERNMENT AND THE RE-INVIGORATION OF LOCAL DEMOCRACY

Clearly, the digital revolution has the potential to reinvigorate and indeed reimagine local democracy. The shift towards interactivity in modern local government communications is also a shift towards greater public involvement in shaping policy and delivery. The faster speeds available via high speed broadband and the ease of access to existing, free, social media tools – Twitter, Facebook, Instagram and YouTube – provide sophisticated methods to enable people to participate in two ways, more personalised, conversations and to conduct consultation to a micro level.

They thus also offer the possibility of involving citizens at the heart of the democratic process and in return offer local government real help in solving local problems. Geelong wants to be a leader in Australia in its approach.

This process of digital reinvigoration of local democracy could take many forms:

- Crowd sourcing problem solving and new policy development online, using the new Dashboard or Open Data platforms
- Increasing blogging, twitter, Instagram and relevant Facebook activity by Councillors and indeed staff, subject to protocols: seek to engage harder to reach residents and younger people on social media and indeed through gaming technology
- ‘Geelong virtual town hall meetings’ held on Facebook and Open Data platform with the Mayor and Councillors answering questions/holding dialogues on key policy issues in real time
- Live-streaming council meetings using Google Hangouts

as a cheap but effective way of getting people more involved in local democracy; linked to Facebook style Q+A /tweeting as above, while meetings are live pod casts should be available online/on the dedicated YouTube channel, which itself should be linked to interactive social media

- Enable staff to engage in dialogues with residents openly online about policy and problem solving – but also encourage the use of yammer for staff to conduct within- and cross council dialogues and engagement to promote innovation by staff;
- Experimenting with online participatory budgeting: an important way to link new thinking on data and technology with a new approach to budgeting. At is most ambitious it can involve residents in ‘outcomes-based’ budgeting – which targets money at the most effective programmes. But many cities globally are allowing residents to directly vote on smaller portions of budget via the web and to choose how the money is spent in their precinct or city from a list of options. Previously in some global exemplars participatory budgeting was a face to face process but Geelong will develop this approach further to incorporate up to the moment features of digital voting and deliberation: a real new frontier in Australian democracy based on the key interactive strength of digital media enabling a democracy based on the exchange of ideas, and intelligent crowd-sourcing, valuing citizens for their expertise as well as their votes.

Recommendation 14: Further explore the implementation of the identified opportunities in which local democracy can be re-invigorated online. Participatory budgeting should be an area of focus.
COMMUNITY FOCUS

A CHAMPION OF INCLUSION: DIGITAL GEELONG PROVIDING OPPORTUNITIES FOR ALL

We want all to access the benefits of the digital era. By ensuring that our online channels are sensitive to the needs of vulnerable groups and the diversity of our communities we can help to ensure they are not left behind as we move services online; however, more is required. Promoting participation and digital inclusion means promoting awareness and addressing skills gaps. It also means efforts are in place to foster the awareness of the benefits of participation in the digital economy as well as programs to develop a skilled, digitally literate community capable of maximising those benefits.

The challenge locally is highlighted by the Australian Bureau of Statistics. ABS reports in 2011 that that 21 per cent of all Australians 15 years or over did not use the internet in 2010-11. Outside capital cities the average is 25 per cent. This figure is much higher for retired persons, low income earners, Indigenous Australians and those living in remote areas.

3.1 THE DIGITAL INCLUSION LINK TO BETTER OUTCOMES

There is a growing body of evidence that shows the importance of and direct correlation between digital inclusion and better social and civic engagement, improved quality of life and higher educational achievement. Digital inclusion also enhances the ability to participate in the workforce and benefit from economic development opportunities. Such digital inclusion is not just a matter of equity or democratic renewal. The really transformational impact for Geelong’s public services – for cost reduction and service efficiency – will come when the largest proportion possible in a local government area is able to engage and transact online.

The elements of the CoGG approach to digital inclusion are:

Provision of WiFi

The Geelong WiFi Information Network Strategy which is attached to this document as Appendix A. This strategy outlines the digital vision for social and economic growth for the CoGG. It promotes and encourages a digital future, by creating new opportunities for businesses, influencing the way people live, work and how they access services.

Awareness

The need to increase awareness of the benefits and uses of digital and identify and promote the value proposition from ICTs for all users in relevant and appropriate economic and social terms by focusing on the transformative effects of digital technologies and broadband rather than on ICTs themselves.

Access

The need for all to have adequate bandwidth capacity, affordable and reliable Internet connections, computer hardware and software and sufficient publicly provided access.

Techno-Literacy

The need for basic ICT information and training to increase user confidence in using both the technology and online content/applications/services (i.e. how to extract value from their use).

Support

The need to ensure access to technical and training support and that it is tailored around the unique barriers that stop people going online.

Applications and Content

The need to develop and produce compelling online content and applications to motivate use and enable users to maximise the benefits of their ICT use.
3.2 THE CITY OF GREATER GEELONG APPROACH TO DIGITAL INCLUSION

The council strongly believes that it is in the interests of the community, as citizens, as neighbours, as learners and as employees, that all are able to participate in the online revolution. Digital Geelong will guide the Council’s efforts to enable all in the local community to have the confidence, access and skills to embrace and take advantage of the digital economy, access public services online and able to participate in the various digital initiatives promoted by the strategy.

Already the advantages of internet access and use do not go to a significant minority in Geelong – those who have never been online, are unable to access the internet at home, or lack the skills to confidently complete online transactions but at the same time are heavily reliant on essential services that are increasingly migrating to online-only provision. Disadvantage can be reinforced by this ‘exclusion’:

- Households that are not connected to the internet are disadvantaged. According to national data “offline” households are missing out on estimated savings of $1000 per year from shopping and paying bills online.
- Being online gives people more opportunities to search and apply for jobs. It is estimated that between 75% and 90% of jobs require at least some computer use.
- Home access to a computer and the internet can improve children’s educational performance. Research shows that while 99% of children in the richest 10% of households can access the internet via a computer, this dropped to just under 60% in the poorest 10% of households with children.

We believe that such a ‘digital divide’ may increase if we don’t work with our partners to respond to the challenge. Unless digital inclusion work reinforces the roll out of digital media, the gap between the digital ‘have and have nots’ may grow. In this context Swinburne University has called for ‘programmes focused on digital literacy and citizenship to be implemented to add to the capacity of the NBN to contribute to these ends’. We agree. It isn’t enough to wait until local residents are online: Geelong Council can help them get there too. Therefore, part of the objective of the digital inclusion program we envisage is to make all communities in Geelong digitally savvy so that they are in effect broadband-ready before the NBN arrives and can make maximum use of digital media more broadly.

Initiatives to enable ‘knowledge transfer’ of digital skills to the community and local workforce must be undertaken and not just for reasons of equity. A recent Pricewaterhouse Coopers study, has shown that where the proportion of the ‘digitally included’ rises in a society by 10% GDP rises by 1%. There is an economic premium for society and for the individual from a digitally enabled community, with the benefits for the latter extending beyond purchasing into learning, skills development, greater community engagement, employability and indeed overall well-being. Geelong wants that premium for its community.

We know from the workshops for the strategy and national surveys that whereas overall familiarity and use of social and digital media are reasonably high and growing in Australian cities, key target groups are vulnerable to ‘digital exclusion’. These include the less well educated, the more elderly, indigenous communities, some migrant communities and some younger people whose knowledge and use of social media are narrower than required for employability in a digital economy. There is also the challenge in Geelong of enhancing the skills of those who thrived in a manufacturing based economy and need to do so in an increasingly knowledge based one.

And though the capacities or curriculum of learners at local schools, TAFE and universities are not the responsibility of the Council, the strategy envisages them all being part the Geelong Digital Partnership and the collaboration required to raise the digital skills and knowledge levels of local students. Research is increasingly showing that a key factor in the decision of companies to invest in places, or for start-ups to emerge in certain locations and not others, is the pool of talent available. A core objective of Digital Geelong must be to ensure that Geelong has a deep pool of digital talent – and be seen in the market to have it. Smart Cities don’t just have excellent broadband connectivity and great mobile reception. They have lots of smart people, have fewer ‘digitally excluded’ – and have a smart council determined to maximise the digital opportunity.
3.3 TAKING THE INITIATIVE ON DIGITAL INCLUSION

Services to help people go online are not joined up enough at the moment in Geelong. Efforts are duplicated across providers, funding is sporadic and does not always align with user needs. Better links and coordination are needed between the public, private and voluntary sector, so that their efforts add up to more than the sum of their parts. Geelong Council will take the initiative to establish the partnership working required across sectors to achieve results in digital inclusion and will also use its own assets to focus the campaign to get the community online.

The Geelong website will be developing a single place called digitalskillsgeelong to help individuals, small businesses and small charities learn to be proficient, confident and safe online. It will provide a one stop shop or repository of local resources and opportunities for accessing, learning and sharing digital skills. As well as links to useful information and services, there will be maps to direct people to where local physical resources and advice are located. This will be a single, trusted, and evolving source for online services that will help instil confidence and trust amongst new users and those supporting them.

Recommendation 15: Create a digital platform called digitalskillsgeelong (for example). The objective of the platform is that it be a one stop shop for gateway digital learning in Geelong.

Collaborations will be deepened locally with universities, TAFE and other skills providers, employers, Centrelink and all relevant agencies working to improve the employability of local people in a digital era. The strategy should above all, ensure partners make digital inclusion a priority and are digital champions for their area, client or community group. Digital inclusion will be a key agenda item for the Geelong Digital Partnership which the Council will convene to deliver Digital Geelong.
Those in work seeking to up-skill

Employees with less digital experience and fewer skills – but a desire to acquire them and be part of the new knowledge economy – are a key group to include in Geelong and up-skill if we are to get all online. Thus digital literacy initiatives will be aimed at this group too.

Whether they are on the factory floor or building site, in the research lab, call centre lab or website design studio, today they can be called upon to perform ‘knowledge work’, create added value through the acquisition, process and use of information.

A focus on re-skilling and/or up-skilling those in work or seeking to enter the workforce will thus be a necessary part of the digital approach. TAFE, Universities or other skills providers – and not-for-profit organisations working with key groups – should ensure that there are suitable ‘digital gateway’ skills courses or ‘taster’ programs for key groups.

Indigenous population

Appropriate training programs and alternative means of accessing public services should be designed and implemented with the involvement of the key groups working with and representing the community.

People with disabilities

International experience has shown that amongst the greatest beneficiaries of digital technologies are people with disabilities. We will work with groups that represent people with a disability so as to ensure that digital inclusion programmes meet their needs.

SMEs and self-employed

See the following chapter dedicated to SMEs, highlighting the importance of this group in achieving Digital Geelong.

Recommendation 16: Set an aspirational target of whole of community inclusion. Work with skills providers and not for profit organisations to engage/upskill key target groups.
3.4 NOT JUST FORMAL DIGITAL PATHWAYS

While formal pathways for digital skills development create an important set of solutions to address skill gaps, digital skills development can take place also through community-oriented digital literacy and participation initiatives. Such initiatives can come from a variety of sources including formal skill providers and not-for-profit organisations working with key client groups, self-help organisations and community groups.

However, digital inclusion initiatives can also be less formal and involve neighbours, friends and colleagues, peak organisations and chambers of commerce, helping others to ‘go on, get online’. Digital Geelong envisages a broad campaign and program of projects to raise enthusiasm, skills and digital inclusion at the heart of which will be a special ‘Go On, Get Online Geelong’ initiative led by the Mayor. This will be unique in Australia.

3.5 GEELONG DIGITAL MATES AND DIGITAL FESTIVAL

This cross community effort could include a Geelong Digital Mates scheme. These would be volunteers in the local community that will give their time to help people learn basic online skills as well as using online government services. The scheme would also provide tangible benefits to the Mates; for example, voluntary work experience helps improve job prospects by building experience and providing references for job applications.

By tapping into the rich and diverse talent pool that exists in Geelong including our volunteers, third sector and local business we can add capacity to develop digital confidence and life skills.

The digital inclusion initiatives could culminate in an annual Geelong Digital Festival or Geelong Digital Day. These could be used to celebrate and promote all things digital including digital inclusion initiatives such as ‘digital neighbour’ or ‘digital learner’ of the year, helping also to profile Geelong as a pioneer in this digital space and as a place with the skills, infrastructure, eco-system, vision and leadership to nurture and attract innovators and enterprise.

Recommendation 17: Create a ‘Go On, Get Online’ initiative; a ‘Geelong Digital Mates’ project and a Geelong Digital Festival or Digital Day.
3.6 THE CONTEMPORARY ROLE OF THE LIBRARY

A key part of the basis of that new profile for Digital Geelong as a networked community will be the new ‘digital infrastructure’, resource for digital inclusion and support for local SMEs embodied in the exciting new central library. We see digital media and the advent of the NBN as a catalyst for both re-assertion of the significance of libraries and an expansion of their role. The digital era will mean an enhancement and expansion of library services to respond to new technology and contemporary community and information needs and will strengthen their emerging role as a community-based network for digital inclusion.

Libraries have a multiplicity of important roles in delivering life-long learning and increasing access to information, knowledge and skills. Increasingly, internationally and within Australia, public libraries are leading the way in building digitally inclusive communities by providing connectivity, promoting skills and enabling knowledge transfer. There are many national and international exemplars.

Alaska’s Online with Libraries (OWL) Project seeks to provide all Alaskans with the benefits and opportunities that come hand in hand with high speed Internet. This includes areas such as e-government services, distance education opportunities and increased access to on-line business opportunities including professional development. The project is enhancing Public Computer Centres at 97 libraries, and is providing faster internet connections to many of these mostly rural libraries. The project establishes a public videoconferencing network for all of the libraries so that they can provide online training for businesses and a centralised digitally connected hub.

There are many other similar examples including the aptly named Bridging the Great Digital Divide Project of Colorado which provides computers, training, and public awareness campaigns in 88 Colorado community libraries.
CURRENT LIBRARIES: DIGITAL KNOWLEDGE HOT-SPOTS

Geelong’s future libraries will use digital technologies not just to serve the community in new ways but to tap into the community, combing the resources of the community and the library to support the transition of the city. Libraries in this sense are increasingly key community hubs, with particular significance for families, baby boomers, the aged, culturally and linguistically diverse (CALD) groups including recent arrivals, and students. The libraries of Greater Geelong are already hotspots of information gathering in various formats including digital access. The Geelong libraries already provide a number of free digitally based services:

- Online catalogues, e-books, e-audio resources and access to a diverse range of electronic information databases
- Community initiatives such as local history data-bases which offers interactive capabilities
- Free Wi-Fi and internet for library members
- Peer internet training program for older people
- Individual internet tour programs
- Podcasts of talks held at the library

In some parts of the world, the existing network of static libraries and mobile libraries within an area are being increasingly exploited as community Wi-Fi hubs to deliver a local network of connectivity for citizens.

The libraries can and should continue to be an integral part of Geelong’s digital transition and inclusion strategy, with the new central library in particular providing a step-change in local digital infrastructure and support.

Recommendation 18: Exploit the opportunities libraries offer as providers of digital infrastructure and platforms for digital inclusion. In particular exploit the potential of the new central library.

FUTURE LIBRARIES: TECH HUBS, ‘MAKE SPACES’ OR ‘FABELABS’

Geelong has long been a place that appreciates ideas, knowledge & learning with a growing reputation for nurturing innovation. Libraries have always been about knowledge and information and the new Geelong library is about all of these but with an opportunity to re-imagine them and the next generation of library users, to develop a focus on the digital but also to be a place where digital, learning and making in innovative 21st century ways can come together in a way which reflects the manufacturing tradition of the area and the ambition to renew the area’s innovation capacity in the digital era.

So it will be offering courses and a calendar of workshops in: InDesign, JavaScript, WordPress, Coding for the Web, Photoshop and online communication.

But it will also offer free access to a broad range of hardware and software, be part of an online community to connect with people of similar interests, provide access to free Wi-Fi and physical spaces to meet with others and to work on your own projects. This where the modern library becomes something beyond consumption of books and assumes a role in co-production.

CoGG needs to ensure that the new Library provides space and support for what have become known as makerspaces, hackerspaces, hackspaces, tech shops and fablabs. These are creative, DIY spaces where people can gather to create, make things invent, and learn, using digital technologies and platforms but also more sometimes conventional means. A makerspace is a place where people come together to design and build projects.

Increasingly libraries, along with cutting edge digital platforms and tools, will have 3D printers and scanners, indeed a whole 3D printing studio that offers the resources of a full suite of 3D fabrication and modelling technologies, with injection-molding machine software. Along with electronics, craft and hardware supplies and tools these will form the core elements of a makerspace, including tools and equipment that are too expensive or specialized for most people to have in their homes.

Makerspaces and fab labs cater to a particular type of library patron: inventors, artists, entrepreneurs, crafters and youth groups. The technology used in these workshops can revolutionize the manufacturing process, allowing designs and creations that can be modified to suit individuals in ways not possible with mass production.

Libraries can provide spaces to develop micro-hardware and mini-robotics, as these are knowledge intensive activities that would benefit from access to information and supported research.

The key is this: ‘making’ in the 21st century has moved out of the individual workshop and gone networked. These library based initiatives are places to create, build, and craft-and they are experiencing increased visits and demand as a result. It is imperative that the new Geelong library enables these kinds of activities as part of Digital Geelong and the support for the local tech and innovation eco-system. The products created by the library-based makers could be showcased at the proposed Geelong Digital Festival.

These examples demonstrate that libraries around the world are embracing technology and high speed internet, but also taking this further by becoming tech hubs and ‘make spaces’ for innovators and product developers. Geelong, given its local tradition of making and innovating, should ensure its new library can play its potential role as this kind of centre and support for skills development, collaboration and innovation – as a new impetus for Geelong businesses here now and those start-ups and talented individuals which we wish to attract.

Recommendation 19: Ensure the new library has the capacity, tools and approach to be a Geelong tech-hub, makerspace or fablab in the future.
We can see that libraries will become increasingly more important in Geelong’s digital transition. We have provided actions to support and build on the library strategies that already exist:

• Fostering digital literacy with a leading role for our innovative library services
• A strong focus on how digital services and initiatives can support creative and exciting ways to make the online and physical experience of the library complementary and integrated.
• Enhance existing efforts and build on progress. Victorian libraries are well connected and will continue to leverage and share knowledge through partnerships e. g. Public Libraries Victoria Network
• To accelerate digital inclusion efforts and help less technically able groups to cross the digital divide.
• Prepare for a ‘wired town’ vision or ‘networked high streets’ that puts libraries and other public spaces at the centre of each community based on the technology that exists today and will develop in the future.
• Explore options to strengthen and foster the skills program. This could include:
  • A ‘cyber citizenship’ program about online safety with a focus on parents of youth, the aged and CALD communities
  • Training programs for areas including website creation
  • Strengthen collaboration with other local councils to support ‘WikiGeelong’ as the vehicle for recording and curating local/regional history.
  • This could include multi-media archives (including sound and video) and a smart tagging system that allows connections to be built between artefacts and stories
• Build on the library’s Emerging Technologies program where people can test and explore a range of technologies
• Develop a truly interactive and cutting edge website for Geelong’s libraries with all the functionalities such as recommended content, commenting capability, news, a calendar and links to external content such as blogs and videos to replace the website interface currently being used
• Develop a library-housed ‘computer club’ (and perhaps a ‘coding club’) as a learning group similar to the book clubs and study groups that already exist to deliver computer literacy skills to the community. This could also be targeted to more proficient groups who use open source software to develop new programs and applications using the library as their working hub and collaboration space

To deliver these strategies, internal actions are to:

• Review potential partnerships and identify external private and not-for-profit partners who are interested in investing in supporting programs for digital inclusion e. g. Smith Family
• Map employee skills against skills needs. Up skill staff and create dedicated roles and recruit specialist staff in order to better transition our libraries into the digital age
• Develop a key digital library hub based on the “Information Commons” model where libraries offer capacity for interactive co-working through the provision of space, appropriate furniture and equipment, and access to technology and its latest applications. This model requires support by library staff with higher level IT skills.
4.2 DIGITAL GEELONG – PART OF COUNCIL’S HOLISTIC APPROACH TO ECONOMIC DEVELOPMENT

Digital Geelong also fits at the centre of a what the recent Victorian Government Infrastructure and Economic Development Committee inquiry praised as Geelong’s ‘holistic, whole of council approach to economic development that aims to integrate urban planning, infrastructure provision and business support programs with an overarching vision for the future of the municipality’.

That approach will help nurture Geelong’s whole eco-system for innovation and promote its profile and market appeal as an attractor of talent and entrepreneurs. A vital part of that new ‘Geelong Offer’ will be the infrastructure, environment and business advice available to SMEs and start-ups in a digital era – and the digital strategy being pursued by an innovative council in support of them.

The aims of the strategy are clear in relation to business. They are to ensure that the digital economy is seen as a high priority by – and is part of the mindset of – local businesses; to ensure digital support activities are in place; to seek to achieve in so doing a local ‘digital premium’ (new jobs, faster growth, greater competitiveness); and above all to position Geelong as a significant, smart, digital city with the right infrastructure and eco-system in place to support and create new business opportunities and to anchor and attract entrepreneurial talent to Geelong. We seek to leverage technology to expand Internet access, support local industry and spark innovation. It is crucial in this process, that the opportunity to make Digital Geelong a magnet for start-ups and innovation-led SMEs must also be seized.

However, bearing in mind that 70% of the companies benefiting from digital media and online trading are actually ‘traditional’ SMEs and not ICT companies, a digital strategy needs to encompass all significant sectors – existing and emergent whether in manufacturing, services or retail. ‘Digital’ must become part of the daily conversation for all businesses in Geelong, all in time developing their own digital strategies as part of their core business strategies. The City will work with a range of partners with the core aim of preparing Geelong for this new digital paradigm and to better support local business for the journey ahead.
The preponderance of smaller companies in Geelong require more information and best practice around what commercial uses can be made of new technologies and interventions which support effective knowledge and skills transfer. These are core goals of Digital Geelong.

The key advantages of SMEs operating online include:

- Saving time
- Attracting more customers
- More effective marketing
- Wider geographic coverage with the potential for customers and partners throughout the world, removing geography from the equation
- ‘virtual clustering’ of companies in the same market but not physically close
- Increased customer interaction, savings and efficiencies including access to new Cloud services which will reduce business costs and raise productivity
- Increased sales
- Simplified process of taking payments
- Enhanced capacity to access the supply chain of larger businesses and win public sector tenders as digital infrastructure and skills are becoming a standard minimum requirement
- Improved marketing with use of rich media, particularly important for retail which operates in a highly competitive environment.

Unsurprisingly in this context, local businesses who have already taken steps to build their online capabilities are keen to develop further.

There is, however, currently a group of local businesses which has not yet embraced online technology. Given international trends and following discussions in the workshops, we conclude that it is likely that well over a third of SMEs in Geelong will not yet have a website. Moreover, at least one in five SMEs will be at the lowest level of digital awareness and skills – those who are more or less disconnected from the Internet.

These businesses are often older, more established companies run by people who are less convinced of the value of digital development. This means that a considerable number of local SMEs may be putting their future growth at risk by missing out on the potential of digital technologies and platforms to increase productivity further. It is vital they get access to the right help to unlock the digital potential.

Identifying the different ‘digital profiles’ of local SMEs will help sharpen the understanding of the specific support required.

Recommendation 21: The City should prioritise business support and knowledge transfer initiatives for SMEs – and target intervention to match their different ‘digital profiles’

4.3 CURRENT DIGITAL INNOVATION IN THE REGION

The strategy does not start with a blank canvas locally. Part of the context for it – and a basis for further development – is provided by:

- The presence of Barwon Health – a recognized national leader in the adoption and implementation of electronic and digital platforms;
- A strong Medicare Local – which plays an important role in creating a highly integrated local health system (important in collecting data across the health sector), and in increasing digital adoption and use of enterprise management across health providers;
- Research strength across Deakin University & CSIRO with health-based digital applications – there are multiple faculties and research centres with health digital / health analytics expertise
- The presence of new and significant health stakeholders – this includes the headquarters of the TAC, Work Cover, DisabilityCare, GMHBA, the National Disability Insurance Service and the South-West Alliance for Rural Health (SWARH), as well as the future Epworth Hospital, all of which are exploring digital technologies and platforms and the greater use of analytics
- The establishment locally of the Australian Sports Technologies Network – wearable computing technologies and digital platforms (to promote health) are two major categories within the sector – hence ICT Geelong’s focus on building capability in wearable sensor technologies recognized as a focal point for future R&D and commercialisation activities, with health and sport applications. This has led to the Head Start business incubator program
- The region is also home to the Australian headquarters of retailers Target Australia,
- Cotton On, RipCurl and Quiksilver. It is estimated that these organisations would employ more than 300 people in some form of ICT capacity.
- The existence and work of ICT Geelong also shows the momentum under way in the region towards engagement in the digital economy. This is highlighted by the success of the annual ICT Invention Test

Recommendation 20: Digital Geelong will continue to build on emerging clusters in health, sports science, retail, university capacity and related analytics.

4.4 ENCOURAGING SMES: A KEY OBJECTIVE OF DIGITAL GEELONG

Encouraging small businesses in Geelong to build their online capability therefore has the potential to be advantageous both for the SMEs themselves and the Geelong economy as a whole. It can accelerate the growth of both.

The preponderance of smaller companies in Geelong require more information and best practice around what commercial uses can be made of new technologies and interventions which support effective knowledge and skills transfer. These are core goals of Digital Geelong.

The key advantages of SMEs operating online include:

- Saving time
- Attracting more customers
- More effective marketing
- Wider geographic coverage with the potential for customers and partners throughout the world, removing geography from the equation
- ‘virtual clustering’ of companies in the same market but not physically close
- Increased customer interaction, Savings and efficiencies including access to new Cloud services which will reduce business costs and raise productivity
- Increased sales
- Simplified process of taking payments
- Enhanced capacity to access the supply chain of larger businesses and win public sector tenders as digital infrastructure and skills are becoming a standard minimum requirement
- Improved marketing with use of rich media, particularly important for retail which operates in a highly competitive environment.

Unsurprisingly in this context, local businesses who have already taken steps to build their online capabilities are keen to develop further.

There is, however, currently a group of local businesses which has not yet embraced online technology. Given international trends and following discussions in the workshops, we conclude that it is likely that well over a third of SMEs in Geelong will not yet have a website. Moreover, at least one in five SMEs will be at the lowest level of digital awareness and skills – those who are more or less disconnected from the Internet.

These businesses are often older, more established companies run by people who are less convinced of the value of digital development. This means that a considerable number of local SMEs may be putting their future growth at risk by missing out on the potential of digital technologies and platforms to increase productivity further. It is vital they get access to the right help to unlock the digital potential.

Identifying the different ‘digital profiles’ of local SMEs will help sharpen the understanding of the specific support required.

Recommendation 21: The City should prioritise business support and knowledge transfer initiatives for SMEs – and target intervention to match their different ‘digital profiles’
wish to pursue this further. Others are at a point where further development is viewed as more costly or outside their areas of expertise, for example, developing a more advanced website. A significant proportion work in primary or secondary industries, including manufacturing and construction.

**Digital advocates:** the Internet already plays a key role in the businesses of ‘digital advocates’, but there is no sign of them reaching a development plateau. They will have moderate to higher level online use and website functionality. They remain interested in developing their use of online technology further and in this they are second only to the ‘digital stars’.

**Digital stars:** The ‘stars’ are the most digitally advanced group. They will have higher level online use and a higher level website. They are advocates for digitisation, having seen growth in their business, often as a direct result of the adoption of digital technologies. They do not feel they have achieved all there is to achieve digitally and the desire to develop further is still strong. They want to grow their business in the next few years, are the most confident personal Internet users and will be committed to further development online in the next few years. Many of the SMEs in this group operate in the retail or service sectors. Their experience and enthusiasm must be harnessed locally as part of the collaboration which will deliver Digital Geelong.

**4.5 SME DIGITAL GROUP PROFILES**

**The disconnected:** these SMEs have not developed digitally and may have seen a plateau in business growth. They are reluctant to develop their use of digital technology. Typically they have a Lower level or no online use and no website. This group contains a large proportion of older, more established companies.

**Digital aspirants:** this segment may not be digitally sophisticated but their attitude towards digital development sets them apart from the disconnected – they have a desire to grow digitally and have taken the first steps on this journey. They may vary between those who have moderate level online use but lower level website functionality or lower level online use but have a basic website. Overall, the tasks performed online by this group are relatively basic such as using search engines and email. The ‘digital aspirants’ tend to be younger businesses, although there are some exceptions.

**Comfortable surfers:** these SMEs are digitally sophisticated already and have developed online in the past, but this has now reached a plateau. These will have high or moderate level online use. Some have become comfortable with the level of development they have reached and do not wish to pursue this further. Others are at a point where further development is viewed as more costly or outside their areas of expertise, for example, developing a more advanced website. A significant proportion work in primary or secondary industries, including manufacturing and construction.
4.6 DIGITAL INFRASTRUCTURE TO SUPPORT MOMENTUM

The strategy envisages the Council taking all opportunities to promote the further strengthening of local digital infrastructure to support this momentum, to support businesses, improve public services and build local community capacity. There are several key opportunities to do so:

- The presence and future growth of the City’s Wi-Fi capacity, expanding beyond the established projects within Central Geelong and the Waterfront
- The advent of high speed broadband via the NBN (whose uncertain arrival has caused some delay in local business planning, as elsewhere in Australia)
- The further upgrade of mobile and wireless services (which are partly substitutive of fibre optic based technology but mostly complementary with fibre enhancing capacity of fixed and mobile devices and mobile enabling creative applications)
- The prospect of new development and new infrastructure investment enabling the installing of fibre optic cabling (whether the NBN or an alternative)
- The advent of the new digitally enabled library in the city centre
- The potential for greater exploitation of what fibre optic capacity currently exists, under-utilised, in various parts of the public sector (schools, TAFE, University, some healthcare providers and VicTrak for example)
- The potential for local companies to collaborate to jointly purchase enhanced broadband capacity from private Internet Service Providers

The City of Greater Geelong needs to understand deeply and continue to advocate for the digital infrastructure needed by the businesses (and the community) of Geelong.

4.7 GOING DIGITAL: THE PREMIUM FOR - AND CHALLENGE TO - SMES

However, the challenge for the strategy is not just that of strengthening digital infrastructure, though that will be an important component also in the broader objective of attracting inward investment of both capital and talent and developing Geelong as a magnet for start-ups. It is about supporting local businesses, with its dominance of SMEs, and retail – experiencing considerable ‘digital disruption’ globally – to acquire the skills and mindset to exploit opportunities in the digital economy.

SMEs are a hugely important part of the Geelong economy, and though there are a growing number of digitally enhanced and progressive enterprises, it was clear from local workshops and interviews that many are not making full use of digital tools. Many small businesses typically lack the resources, time or capacity to explore the potential of, adopt and maximise the benefits of, new technologies and applications.

This market failure needs addressing as there is a significant ‘digital premium’. Research shows that those SMEs who are confidently operating online are more likely to have grown in the past few years and can be optimistic about future growth. There is a strong link between online development and turnover growth. SMEs making frequent use of the internet have been found to be more than twice as likely as those who used it less often to have recorded an increase in turnover since the GFC – and they are the companies anticipated to grow even further going forward.

4.8 DEVELOPING TOOLS TO ASSESS DIGITAL AWARENESS AND PARTICIPATION

Develop or identify a tool to help benchmark the relative uptake and sophistication of business enterprises and organisations within the City of Greater Geelong against other centres. A tool such as a ‘participation barometer’ could measure the level of digital engagement in the Geelong economy.

The ‘barometer’ would reflect progress towards more sophisticated digital use and identify a key checklist of applications to improve the success of organisations in the region. Such a tool is a very useful device for individual organisations or companies to assess where they regarding participation in the digital economy and what uses they might explore to increase their participation and indeed efficiency and productivity. The aim of organisations and policy in the region must be to move from the bottom to the top of the chart over time – and for the Council and partners to assist.

Recommendation 22: Use and promote a digital benchmarking tool as indicated and/or work with ICT Geelong to develop such a tool for local use.

4.9 CHALLENGES AND TARGETED INTERVENTIONS

Even though use of the internet has increased substantially in most enterprises there are still large numbers of SMEs (and retailers) who do not complete simple business tasks online such as using search engines, communicating with customers and suppliers online, providing information via a website or making transactions. Many SMEs and retailers still have not found an effective way of using social media to benefit their business.

One of the largest challenges will of course be engaging the ‘disconnected’ group who currently see little value in
the Internet. Support for this group needs to start at a very basic level, with messages around the time saving benefits most likely to resonate. As business owners in this category are also often less confident Internet users personally interventions aimed at greater digital literacy need to be appropriately personal. The strategy accommodates this.

However, a key opportunity for developing online use amongst local SMEs lies amongst those who have already started along the path of digital development, have seen the benefits and are now keen to do more. By engaging with SMEs during the early stages of digital development, reinforcing positive messages about growth and signposting them to relevant services, there is an opportunity to accelerate momentum amongst this group.

Unsurprisingly, SMEs with the highest current levels of digital maturity are amongst the most likely to fully appreciate the benefits of going online. They are also more likely to want to look for further help and guidance. This largely means that those that potentially benefit the most from Digital Geelong initiatives are also likely to be the most challenging group to target. Digital Geelong will require targeted interventions and targeted support for the aforementioned specific digital profiles and levels of capacity to be found in local SMEs.

4.10 OFFER MORE SUPPORT TO START-UPS: FOCUS ON WEBSITE DEVELOPMENT AND SOCIAL MEDIA

It is especially important for Digital Geelong to support businesses when they start trading, as it is at this point where uncertainty is at its highest. As so many businesses close within the first year of trading, well targeted support for start-ups could also have a positive effect on the economy as a whole. Early momentum will allow SMEs to see the benefit of online development, making them more likely to continue on this path in the longer term.

Although current start-ups will tend to be more digitally savvy than previous generations, the evidence is that they are keen to benefit from online support initiatives and sees this as important for their growth. Although two thirds of today’s start-ups will have a website, many will still provide low level website functionality with only basic information about the company. Research indicates that across the range of needs of this group, website development and use of social media are key elements that such enterprises are keen to improve.

More broadly, start-ups increasingly look, when making decisions on business location, to the digital infrastructure – such as the availability of fibre optic networks such as the NBN, mobile reception, access to free Wi-Fi – but also to what has been called the ‘eco-system supporting innovation’. This can include more holistic issues of city management and the agglomeration and concentration of businesses in an area, enabling companies to access talent, knowledge spill-overs and indeed business collaborations. CoGG has influence over the delivery of these services even if they are not in direct control of implementation.

An innovation eco-system can vary but may also include workspace initiatives, business incubators or co-working spaces – possibly in collaboration with a local university, or in a technically enabled central library as a ‘knowledge hub’ (with perhaps its own 3D printer available to SMEs).

Increasingly, research is showing a shift to preferences amongst employees and businesses for what has become known as an in-town innovation district with cafes, bars, restaurants and that urban vibe sought by the key demography of 25-34 year olds at the heart of innovation globally. Retaining and attracting that demography of talent and entrepreneurship to Geelong must be a core objective of a broader Council-led approach to the renewal of Geelong of which the Digital Geelong strategy is a cornerstone.

Attracting and anchoring University students with digital or science, technology, engineering and mathematics (STEM) qualifications must be a focus. If successful it will also attract relocations of companies as well as start-ups as the top priority for companies when comparing eco-systems for innovation is the availability of talent locally. The existing or emerging foci around health, sports science, advanced design-based manufacturing, construction and indeed retail can provide new job opportunities and sectors to attract and anchor the pool of talent required.

To this end, it is important that the local university offer around data analytics, data visualisation, Big Data and perhaps also Building Information Management be further developed. The City should lobby for a Chair in the digital economy, or analytics, to be inaugurated locally by the University, as part of a Data Research Centre for Smart Analytics, also offering training; consultancy services high quality digital learning materials and continuing professional development opportunities to local business. This would put Geelong on the national data analytics/digital economy map. Existing computer science and STEM students at University locally should be enabled to volunteer to help local young people of school age -or older people seeking re-skilling opportunities – to acquire basic or more advanced digital skills (including coding) as part of a wider ‘Get Geelong Online’ initiative envisaged by the strategy.

Recommendation 23: Partner with tertiary education institutions to attract talent, develop skills – and seek to create a Research Centre for Smart Analytics.
4.11 DIGITAL JOBS FOR ALL!

Contained within the digital opportunity arising from up-skilling is of course a threat of there being a digital skills gap in Geelong unless action is taken. On current trends there may be a digital skills shortage over the next decade that may hold back economic growth. So nurturing coding and programming skills in our young people will improve future employability and provide a talent pool upon which local businesses and the regional economy as a whole can draw.

Of course, much of the discussion about the digital economy implies that the only jobs which matter are those of ICT professionals, software engineers, programmers or coders. Whilst these jobs are important and create most multipliers in the local economy, there will be an increasing number of people with jobs based on digital technologies who themselves are not ‘hard’ technical specialists of these kinds. There will also be more jobs for individuals who are freelancers, self-employed or on part-time/short-term, project based, contracts, working for themselves or for others.

They may be digital media workers, designing websites, providing social media platforms or other creatives supplying digital content. They may be researchers or specialists in analysing or visualising data. They may be online accountants or social marketers, educationists/coaches or event organisers, virtual project managers or providers of HR or PA support online.

This is only a short-list of the variety of jobs which are emerging to service the digital economy. This is a core part of its attraction. But it also goes to the point of having a focus in the digital strategy not just on the needs of companies but on individuals and the skills, training and knowledge needed to access opportunities by the local community. Ensuring these are in place – are they being imparted at school, TAFE/University or by employers and relevant not-for-profit, skills-trainers or business support organisations in this space? – is an important issue for the strategy.

It is not the responsibility of the Council to directly deliver the training and skills inputs required – though there may be more opportunities for the Council to create relevant graduate work experience or internships to improve industry linkages and development. But it should, as a convenor of local alliances and as an advocate for the local community, ensure its partners to the strategy – in government, the start-up community, business and community organisations schools, hospitals, training organizations, digital inclusion activists, the local Digital Stars and Digital Advocates -are doing so.

Recommendation 24: Formally recognise that a wide variety of jobs and employment scenarios will be created in the digital economy. Ensure that partners are designing and delivering appropriate training and skills programs to service those job opportunities.

4.12 THE CITY’S ROLE: A DIGITAL ADVOCATE FOR LOCAL BUSINESS, SUPPORTING KNOWLEDGE TRANSFER – AS WELL AS AND ENSURING INFRASTRUCTURE IS IN PLACE

The strategy envisages the Council, either through its own activities or through partnership with other key forces, promoting the knowledge transfer, skills and infrastructure required by business and the workforce in the digital era. The City should create a Digital Partnership – which includes ICT Geelong – to bring together the various relevant players from the private, public, education /Tafe/University and not-for-profit sectors to promote this agenda. The existence of such an initiative would not simply help coordinate activities but give a strong message to existing business and those Geelong seeks to attract, that the digital economy is a core focus of a unified forward-looking community.

The City will continue to be the advocate of local community and business in seeking to ensure that the NBN is delivered in as timely and as extensive a fashion as possible, locally. It will play the same advocacy role in relation to the provision of mobile services locally and the resolution of any mobile ‘black-spot’ or reception issues.

The uncertainty and delays surrounding the NBN have caused problems in business planning and in any shift from fibre to the premises to fibre to the node – the new approach of NBN – needs to ensure sufficient fibre access is available locally. That will also involve the Council taking a lead on mapping the availability of fibre cabling via other bodies (such as exists in health and education providers and VicTrak) and how local business and public services might access them(see below). The same advocacy and brokering role will be needed in relation to mobile service providers and how their provision might be improved locally and ‘black spots’ reduced.

Recommendation 25: The City should maintain its brokering role on behalf of the local economy in discussions with the NBN as to its roll-out schedule and locations – and in relation to mobile services.
4.13 COGG AS AN AMBITIOUS DIGITALLY ENABLED COUNCIL WILL CREATE LOCAL BUSINESS OPPORTUNITIES VIA ITS OPEN DATA POLICIES – AND ATTRACT ENTREPRENEURS TO THE AREA

We have seen how COGG will seek to lead by example locally, showing how digital platforms and the digital economy can drive more productive use of its own assets, improve services and deepen engagement with the private sector. The workshops and interviews indicated awareness locally that there was a culture shift underway in the Council towards this leadership role and that with the new mayor as himself a ‘digital champion’ the strategic direction of travel was now clear.

The very fact that the Council is highlighting its digital ambitions, both in terms of its own corporate development, service design and provision and engagement with the community and business, will be a positive signal to the talented and innovative – whether here already or potential re-locators, to explore new possibilities in Geelong. Another key part of this ‘open for digital business’ message is a commitment to Open Data.

We have seen how the significant quantities of data the public sector and governments produce are set to revolutionise the way we manage our public services, engage with and are accountable to our communities and design and build our cities (These issues were dealt with further in the section above on the ‘Council as a digital leader’ ). But an ‘Open Data’ approach by the Council can also do more for the economy than inform better civic insight. It can help create products and services for markets and develop new opportunities for local SMEs.

The City can spark an innovation ecology through identifying the range of data sets it has produced/will produce and making them readily available online so that local companies are able to build relevant applications and offer services by using the data or by presenting key data in more user-friendly ways: there is no reason why Council data cannot be as easy as navigating Google or Facebook.

Further, access to council research and data can also help local SMEs access vital leaning and market-relevant information at low or nil cost. The approach, subject to the right controls and regulatory framework, has a significant potential economic value, creating new business.

The City should progress Open Data initiatives through a modern open data platform and sharing Application Programming Interfaces (APIs) to enable developers producing online systems to link up with Council systems and provide useful applications for the public.

Material should be released in machine readable form on an open source website with clear policies on reuse. And no user should have to have a degree in social geography or have a post-graduate experience in research techniques to be able to understand the data sets supplied. However, the Council will have to consider how local business newly exploring Open Data can access the skills, knowledge and support to use data. And of course, though there are plenty of excellent tools out there for people who are already very into their data, but there’s very little available to data novices.

Recommendation 26: The City should iteratively release all relevant datasets digitally to help local business development.

4.14 INITIATE SERIES OF ‘HACK DAYS’

The City should also set up a series of ‘hack days’ or competitions to engage local SMEs/software developers and coders in developing new or better uses of the data that they are releasing addressing specific problems facing Geelong. These may involve prizes for the best, most innovative, web or mobile applications, resources or toolkits or even or help in securing funding from sponsors to turn ideas into functional products. Hack days can also be used to trial any new products and services and the Council could itself consider procuring and implementing preferred high-impact innovations to improve services and cut costs. The City could in this partnership with local business develop the ‘Geelong data store or dashboard’ recommended elsewhere in the strategy.

The deeper message of such an approach is also that Geelong is signalling that it is opening up its administration and services to local businesses and entrepreneurs and wants to accelerate local innovation while leveraging public spending more effectively to deliver better services. It also shows a culture actively supporting the research and development of new applications by partnering for innovation with business.

Recommendation 27: The City should create local business opportunities, ‘hackathons’ and other incentives using its own and other government agency data to develop digital applications.

4.15 CO-WORKING SPACE – AND OTHER DIGITAL WORKSPACES

The workshops and interviews supported the concept of dedicated, serviced ‘co-working’ spaces with best in class connectivity as being highly relevant locally, given its proximity to Melbourne alongside the attraction of not having to commute every day to Melbourne if possible.

There is a spectrum of such spaces and business models to be found in other cities with some being privately provided, others being partnerships between the public and private sectors and others being publicly provided (such as via
libraries). Some are for self-employed ‘mobile workers’ and others are essentially back offices for major companies. There is appetite for some design thinking to be applied as to what needs to be nurtured locally and we recommend the Council and ICT Geelong further develop a proposition for a digitally enabled co-working centre in a suitable location to study the effectiveness of the centre in reducing commuting and encouraging collaborative working.

However, given Geelong’s desire to see Digital Geelong as part of a broader strategy for renewal and given the recent research showing that innovation favours in-town districts which combine accommodation, densities of companies, talent, sources of investment and advice, digital infrastructure and urban attractors such as cafés, bars and restaurants, it is important that in addition, a network be mapped /created of what might be called ‘Geelong’s public digital and Wi-Fi workspaces for mobile workers’. These might in case of the new library be a more formal ‘knowledge hub’ in strategic location but they will also be more informal venues such as cafes, hotels and retail outlets.

4.16 ICT GEELONG

The creation of ICT Geelong gave an early indication of the importance to the Council and the area of the emerging digital economy and the need to equip local companies with appropriate knowledge and skills to take advantage of it. It remains close to the local market and undertakes ‘grass roots’ presentations on the digital economy with local SMEs. It has recently researched and published a report on the digital activities in the region with a number of illuminating case studies. It has a directory of local digital providers. It helps bring the public and private sectors together around this agenda and is playing an active role in the development locally of digital clusters around sport science and health.

A key decision for the Council to take relates to the role it sees ICT Geelong playing in delivering the broader ambitions of Digital Geelong. Whatever the specifics of the decision made – and there is a spectrum of choices possible – there should be even greater collaboration and shared learning/projects going forward and with ICT Geelong playing a prominent role in any Geelong Digital Partnership; whether it should in a sense become the secretariat for the Partnership is a key matter to be explored though it is vital that Digital Geelong be seen as a core strategy for the Council’s strategic centre to have oversight of, in association with the heads of the various departments/directorates and Geelong’s dedicated economic development agency, Enterprise Geelong. Digital Geelong is a Council led ‘digital masterplan’ and central to the Council’s vision for Geelong.

Recommendation 28: The City should clarify the role it wishes ICT Geelong to play as part of the digital partnership for Digital Geelong.
5.1 Partnership Action on Complementary Fibre: A Strategy for Using Existing Publicly Owned Fibre Capacity More Broadly and Imaginatively – Ahead of and Alongside NBN Roll-out

This is a digital strategy not an NBN strategy in part because of the uncertainty of the roll-out of the NBN which has meant that delivery timetables have been missed and roll-out maps turned out to be misleading and speculative. In practice most mobile services mapping turns out to be inaccurate and unreliable too because they give best case scenarios and capacity rather than real time data on performance: no supplier draws attention to their service ‘black spots’ in Greater Geelong for example.

The positive aspect in the NBN situation is that it reminds us that a digital strategy needs to embrace all technologies and delivery systems. More positively, the uncertainty over the roll-out of the NBN needs to be filled by complementary action so that any broadband ‘supply gap’ is filled and the community is ‘broadband-ready’ and digitally enabled ahead of any such NBN roll-out. Such ‘filling-in’ action is entirely feasible and should be a priority. Digital Geelong proposes such action in relation to alternative supplies/suppliers of high speed broadband fibre connectivity. We propose action to identify alternatives whilst the NBN roll-out is determined but also to complement any such roll-out.

A key option is ‘supply aggregation’. Fibre optic cabling, in some cases with NBN-level capacity and speeds, has already been laid down in the region by a number of publicly funded bodies or institutions. These include schools, TAFE, universities, some hospitals, the University (with its globally competitive AARnet), and some local governments (in many forms such as cable connecting new developments and Council offices and libraries).

Use of that capacity, whilst increasing, can grow further and more imaginatively. It must. It might be used not just to support the activities (and income) of the specific fibre owning organisations but also to help convene and co-ordinate these forces and secure their buy-in and contribution, so as to obtain the maximum benefit for, and impact on our local community and business.

Recommendation 29: The City should create and chair a Geelong Digital Partnership involving all key forces required for the strategy.
5.2 DEMONSTRATED OPTIONS SEEN IN OTHER CITIES

There are three other broad options to bridge the supply gap until the NBN is rolled-out:

- Existing ISPs and demand aggregation
- Expedite the NBN
- Self-build

EXISTING ISPS AND DEMAND AGGREGATION

There are already many high quality commercial providers of internet services and broadband connectivity in the region. Given the long time it will take to deploy the NBN, they will be considering how they should invest to meet demand. To help service providers make a business case for augmenting capacity, a useful tactic is to aggregate demand and to use government purchasing to provide what have been called ‘conditional anchor tenants’. A radical example would be a broad public sector broadband aggregation for example between councils (and other public agencies) in the region. Aggregating the demand of public service providers could purchase better connectivity from private sector ISPs/Telcos in the period until the NBN is ubiquitous, reducing costs and improving speeds/services in the region.

The Digital Partnership could:

- Work to identify/map the existing fibre available in the region in the various institutional locations
- Explore how partners might increase and diversify their use of that fibre
- Explore further collaborations across sectors

The Council and ICT Geelong should map all existing fibre networks in the area, working with the partners to the strategy

open up access in the way discussed. There needs to be an exercise to map and research those who have such fibre connectivity already – and may be willing to share.

CoGG should thus identify public organisations with high speed fibre (TAFE/Hospitals/universities (AARNet)) to explore opportunities for using/extend use of their facilities.

Though there are some vital barriers around child protection and privacy, greater cross-sector collaboration and wider usage can be achieved. The existing fibre network is under-used and the strategy stresses the opportunity, negotiated within the Geelong Digital Partnership, to support collaborations which will bring raised usage of that fibre and diversify its range of uses/users. Internationally, and in some parts of Australia, multi-purpose public service hubs are already being designed around existing fibre nodes – and we can do the same in Geelong.

The Council and ICT Geelong should map all existing fibre networks in the area, working with the partners to the strategy
infrastructure: and the Council should prioritise this possibility in planning controls and discussions with developers.

5.3 EXPEDITE THE NBN?

Many councils and RDAs have spent a lot of their energy and effort on lobbying to get early release sites nominated in their respective patches. This should not stop.

The NBN roll-out may be influenced by demonstrating:

- Plans for the deployment of complementary (or competing) infrastructure
- Motivation within the community to take up the network (demand register)
- Business models in place to exploit the NBN
- Commitment from local government to subsidise the deployment cost (and other practical assistance)
- Facilities access to complementary infrastructure, and
- Key strategic digitally equipped properties (libraries and neighbourhood centres for example).

5.4 SELF BUILD – DIRECT ACTION

Finally, there is the direct approach to filling the supply gap by building capacity for one’s own network. In other countries, municipal fibre networks have been tried. Some organisations in the region have already taken this path:

Some local councils have opportunistically installed fibre capacity and leased it to equally innovative ISPs -they have been laying down its own fibre network at the same time as new infrastructure is built – and have been leasing this to private sector ISPs. Some councils have sought to create local networks leveraged off strategic fibre links or add to local wireless and mobile capacity through collaboration with ISPs, commercial fibre providers or mobile providers.

5.5 TALENT ATTRACTION AND RETENTION MUST ALSO BE A PART OF THE STRATEGY

Globally, the sweet-spot or ‘dream demographic’ for knowledge based companies is the 25-34 year olds. These are also the most mobile and they will determine which places grow; cities are in competition for them and Geelong will be competing with Melbourne for them. A community which doesn’t attract, welcome or retain these desirable workers likely has problems with innovative entrepreneurs of any age.

The education and skills they have, and their energy for innovation, are vital for growth. As the knowledge economy grows in significance so too does the importance of having such educated workers locally. The importance of education to economic success has increased dramatically in past two decades and globally the best educated cities grew over twice as fast as the others.

Wireless systems, the cloud and flexible working practices mean that major conglomerates no longer need huge offices for servers and staff – smaller units are just as viable. Vibrant, mixed-use communities are at the heart of the new tech industry vibe.

The exchange of information and ideas is central to any creative industry, and tech is no exception. Creative clusters allow innovation to thrive. But it is not just innovation within a single company that is productive, the innovation of whole industries and the wider creative community makes a difference.

This means the human interaction allowed by cities has become a key attraction in the search for workspaces by tech companies. Cafés, bars, shops, a good retail offer, great virtual connectivity and a variety of housing and low-cost office space provide the ‘social infrastructure’ and real estate foundation they seek. The growth in tech industries goes hand in hand with the urban renaissance of town centres, the densities of mixed uses they enable and the knowledge spill-overs they encourage.

Recognising this and reinforcing the attractions of the urban centre of Geelong are actually in the current debates an important part of a digital strategy. This is consistent with Geelong’s general approach to urban renewal but needs to be re-emphasised – and planning for the centre needs to encourage mixed uses and density to add to its economic potential. This will also reinforce retail viability in the centre.

AS A COORDINATOR OF THE URBAN RENEWAL OF GEELONG, WITH A DIGITAL AND TALENT ATTRACTION STRATEGY TO CREATE THE LOCAL TECH ECO SYSTEM

Research, from global cities, shows that a modern ‘tech ecosystem’ is not just something to do with business support, regulation, skills availability or even digital infrastructure and co-working spaces. It is much more holistic and based on the kind of combination of urban renewal and digital innovation for which Geelong was praised by the Victorian Government inquiry into local economic development. It also requires a conscious talent attraction strategy.

Wireless systems, the cloud and flexible working practices
diversity; messy intersection of activities, the layering of the old and new, an integration rather than segregation of uses: a profound shift favouring innovation districts in cities rather than exurban incubators.

Simply put: the current generation of tech workers doesn’t want to toil in soulless Office Space complexes surrounded by moats of parking or in dispersed factories. The trend as Business Week says: ‘is to nurture living, breathing communities rather than sterile remote compounds or research silos. A new nexus between innovation and urbanism fitting new demography has emerged. . Place-making and economy shaping go together in the tech ecosystem in the digital era.

This means that going forward innovation and denser mixed use centres with cultural, recreational and retail amenities will attract highly educated, innovative, entrepreneurial individuals and benefit the area’s viability and success. CoGG needs to continue to nurture that new nexus between innovation and urbanism as part of its broader economic and digital strategy. Digital and urban vibe go together and reinforce each other: a perception consistent with CoGG’s overall economic, development and renewal strategy whose integrated, ‘holistic’ approach was, as we have seen, praised by the Victorian Government Inquiry into council-led economic development strategies.

A MARKETER OF GEELONG AS A NETWORKED COMMUNITY AND AS ‘THE COMPETITIVE EDGE’ OF MELBOURNE: CONCLUSION OR NEW BEGINNING?

As the key strategy recommendations get implemented, Geelong, council, area and community will acquire the infrastructure, skills and reputation of, depending on choice, a ‘smart city’ or ‘intelligent community’. The branding of either is valuable and can be secured by Geelong in due course as the quality of the ‘Geelong Digital Product’ continues to improve.

The Intelligent Community Forum Indicators in particular provide a good framework for assessing progress not just in building digital capacity but in building prosperous local economies in the digital economy.

They are:

- Broadband/ connectivity
- Knowledge workers
- Innovation
- Digital Inclusion
- Marketing and advocacy

This indicators identify the key criteria that enable a ‘virtuous cycle’ of positive change by interacting with one another. So digital connectivity supports the growth of a knowledge workforce as well as creating the foundation of programs of digital inclusion. This then feeds a rising level of innovation as well as increasing demand further for connectivity (and skills). This dynamic momentum then becomes the core ‘value proposition in economic development marketing of a community or city. This is why Digital Geelong is not a marginal strategy for ‘geeks’ but a core strategy for CoGG.

And why the imperative to market this improving and fast changing product to key demographics and start-ups needs to be taken up by the Council, as change takes place on the ground.

Like businesses facing greater global competition, cities like Geelong, which are re-structuring, must communicate harder than ever /better than ever, their advantages and explain how they are maintaining or improving their position as great places to live, work and build a start-up. The story of Digital Geelong needs to be effectively told and shared with the wider world – particularly those in the public and private sectors we wish to see invest in this momentum and those talented people we wish to anchor in or attract to Geelong to take this story decisively forward. Given the communication skills of the current leadership of CoGG, the story will be excellently told.

At the same time, advocacy by the Council leadership and partners of Digital Geelong needs to have as much of a ‘within Geelong’ focus as an external one, as a new vision of the future of the community must be embraced by it.

We will expect the new Geelong Digital Partnership to have this community awareness raising campaign as an essential item on their agenda. This digital enthusiasm/inclusion campaign must be a priority, with specific partners being digital champions for their area, client or community group.

The local and regional media should be involved and partners should use all their communication channels for the broader campaign to engage and enthuse local communities about the opportunities of the digital economy, participating in e-democracy and the advantages of accessing services online.

**Recommendation 30:** Using the Intelligent Community Forum criteria as benchmarks, seek to establish Geelong as a global Top 21 Intelligent Community by 2019.
APPENDIX A

GEELONG WIFI INFORMATION NETWORK

WIFI INTERNET NETWORK STRATEGIES

WIFI NETWORK OPPORTUNITIES

PREPARED FOR CITY OF GREATER GEELONG

MARCH 2015, FINAL VERSION
OVERVIEW

This document presents an outline of the strategies, policies and procedures required to be included in the Digital Geelong Strategy in respect to the provision of a WiFi Internet information service to individuals and businesses within the City of Geelong, leveraging and learning from the free-WiFi project undertaken in the Geelong CBD and Waterfront precincts.

BACKGROUND

GeelongInfo.net (GiNet) has grown from the trial WiFi Project developed for the UCI World Championships, by a group of council and local stakeholders. The project started with one access point and has now grown to cover a significant area of the Geelong CBD and Waterfront precinct with over 30 WiFi access points. These access points service Central Geelong including the central bus interchange, Market Square Shopping Centre and across the Geelong Waterfront from Deakin to Eastern Beach.

The GiNet project was initiated to provide residents and visitors with WiFi internet access to enable delivery of a range of community, tourist and services information over portable smart phones and tablets. The GiNet service offers unlimited access to a range of community information from council, community organisations such as transport, health and education and from other stakeholder websites. The network provides users with a free, limited download WiFi service to access the internet.

The WiFi network leverages the investment made in the City of Greater Geelong (CoGG) optic fibre network. The network was installed to provide digital communications between CoGG sites and as a backhaul network for the City Safe CCTV Camera Network. This provides the wireless network with an infrastructure backbone which is available and free of transmission costs. In addition, many of the CCTV sites within Central Geelong and the Waterfront precinct co-host a WiFi access point.

CoGG and the project stakeholders have made significant investment in the GiNet WiFi network since 2010. This investment included funds for the rollout of WiFi access along the waterfront from Deakin University. In return Deakin University users have gained access to the Eduroam network via the GiNet infrastructure. A similar association is being developed between GiNet and Barwon Health with the integration of Barwon Health’s internal network to assist CoGG IT and the GiNet project.

The project has seen an expansion of the WiFi and CCTV infrastructure into Belmont, Leopold and Portarlington, with other suburban and township sites under consideration and development. Discussions with Tourism Geelong and Bellarine are in progress to enable an additional wireless network to be established focused on tourists and local tourism businesses.

VISION

The Digital Geelong WiFi Strategy

The Digital Geelong Strategy outlines the digital vision for economic and social growth for the CoGG. It promotes and encourages the digital future, by creating new opportunities for business, influencing the way people work and how they access services.

Digital Vision

‘Geelong can transition to a nationally recognised digital economy. It will require a connected, digitally empowered and innovative community with enterprises at ease in the digital environment – and a digital champion; that must be the council.’

The GiNet Project Strategies to be adopted by CoGG in the implementation of a Digital WiFi Information Network are to be consistent with the Digital Geelong Strategy and will be supported by a set of policies for WiFi deployment and operations.

WiFi Information Systems Vision

The fundamental purpose of the GiNet project is to provide free and ubiquitous access to digital information services over commonly owned wireless devices. This reflects the digital vision for economic and social growth for the city and is consistent with the Digital Geelong recommendations.

Recommendation 2: Digital Inclusion must be at the heart of Digital Geelong.

‘…as technology changes, significant disparities in access and opportunity are emerging. Unless this is remedied the digital divide will be truly entrenched by the end of the decade. Determined that all in the community must benefit, Digital Geelong has ‘digital inclusion’ at its heart. The Council will work with partners from the public, not for profit and private sectors, to ensure our community and business have the skills and infrastructure required to participate fully in the digital era.’

Recommendation 4: Understand the variety of key roles the Council will play.

‘…use all opportunities provided by digital media and high speed broadband to increase the capacity of our citizens to communicate with us and with one another, to share key data, to open up access to both policy development and the political process and to work with us to deliver better services and outcomes.’
Digital inclusion, social interaction and community engagement

Support CoGG initiatives through ICT Infrastructure development allowing:

• Cost free access to digital information by all community members over WiFi enabled devices and computers
• Social Media programs fostering community engagement
• Establishment of infrastructure to support community programs and workshops, such as The ‘Get on I.T.’ (community based pop-up digital learning workshops and other digital learning space projects)

Increased tourism visitation and major event activity

Improve ICT communication networks to attract:

• Additional visitation to the Geelong Region through increased visitor satisfaction and service levels
• Major Event organisers to the Geelong region by providing WiFi information systems for the dissemination of information around both indoor and outdoor event precincts

Collaborative initiatives with CoGG and third party stakeholders to:

• Establish retail and marketing programs with regional businesses
• Host Tourism Information services and promotional activities
• Drive existing and future community event programs.

CONTEXT - GINET WIFI STRATEGY PROJECT

The purpose of the project is to develop a strategy and set of policies for WiFi deployment consistent with the draft CoGG Digital Strategy. The strategic imperatives for the project include:

Information delivery and communications outcomes

Improved information delivery of:

• Council services to ratepayers
• Community services to the public
• Retail and business services
• Health and education
• Tourism information

Community Infrastructure development providing:

• Wireless network infrastructure
• Greater asset utilisation and return on investment
• Web based information services portal
• A WiFi access hierarchy to manage information delivery applications
• Development of analytical tools to provide market intelligence for future infrastructure investment

Accessible free internet access for the community

Implement a free WiFi Internet Service allowing:

• Establishment of infrastructure to support WiFi connectivity
• Introduction of management systems to monitor and control internet use
• Reporting of user activity and location

Public WiFi access hierarchy and deployment standards for the:

• Selection of suitable WiFi Zones
• Provision of quality WiFi Services
• Management of information delivered
• Filtering of undesirable content
EXTERNAL STAKEHOLDER COLLABORATION

A collaborative approach to infrastructure development and sharing is fundamental to the GiNet Project. The present GiNet stakeholders include CoGG, Deakin University, The Gordon TAFE and Barwon Health.

Involvement of external stakeholders has allowed the physical expansion of the network through financial support and has greatly increased the reach of the GiNet network into areas serviced by these stakeholders. The GiNet network will continue to grow and increase its relevance for community information delivery as these collaborative relationships are extended.

The advantage stakeholders receive in this environment is in the extension of the coverage area which they obtain, allowing them to communicate with their own users in the public spaces managed by the CoGG GiNet Project and precincts managed by Partner Organisations.

MARKETING SERVICES AND NETWORK COMMERCIALISATION

There are significant commercialisation opportunities driven by the GiNet Project and the creation of a broad based wireless communications network. The massive uptake of smart phone and tablet devices and the incredible pace of development of applications being delivered over this platform have given marketers and web developers a new set of tools to advertise and promote products and services.

Many web marketing companies are now specialising in the provision of intelligent marketing systems using social media and interactive communications to reach targeted markets with offers and promotions. In the future the value of the investment CoGG has made in the GiNet WiFi network could be leveraged to provide a commercial return from marketing activities presented by these web marketing companies.

Commercialisation of the network can be achieved without degrading the community services provided. These services will need to be safeguarded from misuse through appropriate commercialisation strategies and policies. Commercialisation initiatives have not been considered appropriate for the GiNet project in its current development phase. In the future commercialisation should be considered to provide funding for network expansion and ongoing operational cost recovery.

DIGITAL INCLUSION

The Digital Geelong Strategy promotes the digital economy, securing partnerships and supporting not for profits and business to foster ambitions, growth and access. These are all key roles of Council.

The Digital Geelong Strategy aims are based on council–led initiatives to create a ‘digital partnership’ that engages all government tiers, the public, and private and not-for-profit sectors to:

- Improve the design, economy, efficiency, effectiveness and responsiveness of Council services
- Improve engagement with the community and business and the very functioning of our democratic process by using new digital platforms
- Identify the core roles of the Council in promoting the digital economy in Geelong – leading by example as a service provider

The principal of Digital Inclusion within the draft Digital Geelong Strategy concludes:

‘…There are different reasons why people may not be regular users of digital services. They may be disadvantaged by a lack of skills or confidence, or find going online is difficult because of access, location or affordability. Many of those who are currently digitally excluded are those who could benefit most.’

Digital Innovation must ensure all communities have maximum access to digital resources. The GiNet Project is a significant part of the fabric required to achieve this goal.
GINET PROJECT STRATEGIES AND POLICY

The GiNet strategies and policies provide a framework for the selection, planning, implementation and management of a Digital Communications Network. The proposed strategies associated with the operation of the GiNet WiFi Communications Network are summarised in the following tables.

NETWORK INFRASTRUCTURE AND OPERATIONAL PLATFORM DEVELOPMENT

Table 4 – Strategies to develop network infrastructure and the operational platform

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Outcome</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information and Communications Technology Application</td>
<td>Freely accessible wireless connections to all compliant wireless services, in particular small screen smart phone devices</td>
<td>Deliver an industry standard WiFi Communication Network designed for mobile devices with free internet access</td>
</tr>
<tr>
<td>Integrated Infrastructure</td>
<td>Optimum utilisation of community owned communications assets</td>
<td>Build the network around the established ICT infrastructure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develop partnerships to maximise the shared use of existing and future infrastructure</td>
</tr>
<tr>
<td>Network Expansion</td>
<td>Coordinated and cost effective network development in appropriate locations which benefit stakeholders and users</td>
<td>Develop a profile strategy which identifies appropriate locations that meet deployment policy criteria</td>
</tr>
<tr>
<td>Collaborative Networks</td>
<td>A WiFi network which all parities mutually benefit from increased reach and access</td>
<td>Develop partnerships between stakeholders to allow external stakeholder WiFi networks to be integrated</td>
</tr>
<tr>
<td>Information Delivery</td>
<td>Cost saving and improved information delivery utilising commonly operated wireless devices preferred by users</td>
<td>Deliver digital Council and community information through the wireless network</td>
</tr>
<tr>
<td>Network Management</td>
<td>Effective and efficient network monitoring and control systems providing valuable usage data and analytic intelligence</td>
<td>Deliver centralised management of the network over all forms of connectivity</td>
</tr>
<tr>
<td>Digital Inclusion</td>
<td>Ubiquitous Internet access for all residents and community members without user access fees</td>
<td>Provide free wireless internet connectivity through the network within approved locations</td>
</tr>
<tr>
<td>Commercialisation</td>
<td>Effective marketing and promotional activity assisting in delivery of CoGG and community information. A network which is generating revenue through external partnerships</td>
<td>Investigate marketing, promotional and social media opportunities which will allow commercialisation of the network to occur and support ongoing operation and expansion</td>
</tr>
</tbody>
</table>
## INFORMATION SERVICES PORTAL DEVELOPMENT AND WEB CONTENT MANAGEMENT

### Table 5 – Strategies to develop network infrastructure and the operational platform

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Outcome</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>CoGG Information Services</td>
<td>Freely accessible wireless connections to all compliant wireless services, in particular small screen smart phone devices</td>
<td>Deliver an industry standard WiFi Communication Network designed for mobile devices with free internet access</td>
</tr>
<tr>
<td></td>
<td>A single digital point of entry for all CoGG services and enquiries tailored to the users and the selected communications channel.</td>
<td>Focus on CoGG Information Portal and website integration and development or Develop an inclusive CoGG digital information portal which integrates all communication channels and services</td>
</tr>
<tr>
<td>CoGG Resident Engagement</td>
<td>Coordinated and cost effective network development in appropriate locations which benefit stakeholders and users</td>
<td>Develop a profile strategy which identifies appropriate locations that meet deployment policy criteria</td>
</tr>
<tr>
<td></td>
<td>A WiFi network which all parties mutually benefit from increased reach and access</td>
<td>Develop partnerships between stakeholders to allow external stakeholder WiFi networks to be integrated</td>
</tr>
<tr>
<td></td>
<td>Communications support and Internet connectivity allowing greater access to community information and CoGG digital and social media initiatives.</td>
<td>Work with the community in the development of digital programs to ensure alignment with their needs and expectations</td>
</tr>
<tr>
<td>Community Information Services</td>
<td>A single digital point of entry for community organisations with programs and physical environments tailored to users.</td>
<td>Provide a single point of entry for CoGG’s community development department and community organisations programs</td>
</tr>
<tr>
<td>Digital Inclusion</td>
<td>Ubiquitous Internet access for all residents and community members without user access fees</td>
<td>Provide free wireless internet connectivity through the network within approved locations</td>
</tr>
<tr>
<td></td>
<td>Overcoming the Digital Divide by creating free and ubiquitous access to the Internet utilising affordable mobile devices.</td>
<td>Engagement with the community to ensure their involvement in online activity and projects</td>
</tr>
<tr>
<td>Retail and Tourism Services</td>
<td>Single point of entry for tourism and corporate programs supporting economic development in the region.</td>
<td>Collaborate with Local/Regional Tourism Organisations and Traders Associations</td>
</tr>
<tr>
<td>Stakeholder Partner Program</td>
<td>Coordination of information portal access with a single point of entry associated with individual Partner Program Services.</td>
<td>Collaborate with key stakeholders providing Education, Health and Transport services.</td>
</tr>
</tbody>
</table>

## INTELLECTUAL PROPERTY

Intellectual Property (IP) utilised in the development or operations of the GiNet project will remain the property of the individual MoU member that contributed the IP.

Project Logos or Trademarks developed by the GiNet project will remain the property of the individual MoU member that provided these designs.
POLICY DEVELOPMENT PROGRAM

The implementation of the strategies outlined above will require a set of policies and procedures to be developed. The documentation should address the selection of sites and the implementation and management of the physical network. The documentation should also address the provision and management of content being provided to users of the GiNet WiFi Network. An overview of the elements to these policies is shown below.

POTENTIAL DEPLOYMENT POLICIES

• Location profiles for suitable sites within CoGG key activity areas
• Capital and recurring cost assessment and investment criteria
• Physical infrastructure deployment guidelines and performance standards
• ICT management and performance standards
• Network security policies
• Network partner policies
APPENDIX B

DIGITAL SURVEY RESULTS
DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS ABOUT DIGITAL TECHNOLOGIES?

ANSWERED: 37  SKIPPED: 0

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>I don't know</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>It will enable staff to work more flexibly</td>
<td>0%</td>
<td>2.70%</td>
<td>8.11%</td>
<td>45.95%</td>
<td>43.24%</td>
<td>37</td>
</tr>
<tr>
<td>It will help officers to provide assisted digital access where possible</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>37</td>
</tr>
<tr>
<td>It will make the journey better for our community</td>
<td>0%</td>
<td>5.41%</td>
<td>18.92%</td>
<td>56.76%</td>
<td>18.92%</td>
<td>37</td>
</tr>
<tr>
<td>It will improve accountability to the public by making performance more transparent</td>
<td>0%</td>
<td>10.81%</td>
<td>35.14%</td>
<td>40.54%</td>
<td>13.51%</td>
<td>37</td>
</tr>
<tr>
<td>It will give equal access to all citizens</td>
<td>2.70%</td>
<td>43.24%</td>
<td>24.32%</td>
<td>24.32%</td>
<td>5.41%</td>
<td>37</td>
</tr>
<tr>
<td>It will help our community to interact with us</td>
<td>0%</td>
<td>2.70%</td>
<td>10.81%</td>
<td>56.76%</td>
<td>29.73%</td>
<td>37</td>
</tr>
<tr>
<td>It will help us to regenerate our local economy</td>
<td>0%</td>
<td>8.11%</td>
<td>45.95%</td>
<td>37.84%</td>
<td>8.11%</td>
<td>37</td>
</tr>
</tbody>
</table>

Q1 - Q1

50

DIGITAL GEELONG | APRIL 2015
Q2 ARE THE FOLLOWING ITEMS IMPORTANT TO A SUCCESSFUL DIGITAL APPROACH?

ANSWERED: 37  SKIPPED: 0

Digital leadership within the organisation 0% 10.81% 89.19% 37
Creating a digital strategy to guide the organisation 2.70% 13.51% 83.78% 37
Creating a business case for digital led change 2.78% 16.67% 80.56% 36
Leadership across local government about developing digital public services 5.41% 24.32% 70.27% 37
A pool of high quality digital tools and skills 0% 8.11% 91.89% 37
Sharing experience and developing local digital services 0% 16.22% 83.78% 37
Hearing more about exemplars of digital success in public service 8.11% 21.62% 70.27% 37

DIGITAL GEELONG | APRIL 2015
WHO IS LEADING DIGITAL WITHIN YOUR ORGANISATION?

ANSWERED: 35  SKIPPED: 2

<table>
<thead>
<tr>
<th>Position</th>
<th>Yes</th>
<th>No</th>
<th>I don't know</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Executive Officer</td>
<td>16.67%</td>
<td>20%</td>
<td>63.33%</td>
<td>30</td>
</tr>
<tr>
<td>Head of ITC</td>
<td>53.33%</td>
<td>6.67%</td>
<td>40%</td>
<td>30</td>
</tr>
<tr>
<td>General Managers</td>
<td>17.24%</td>
<td>34.48%</td>
<td>48.28%</td>
<td>29</td>
</tr>
<tr>
<td>Executive Director of Enterprise Geelong</td>
<td>10.34%</td>
<td>24.14%</td>
<td>65.52%</td>
<td>29</td>
</tr>
<tr>
<td>Individual Managers</td>
<td>56.25%</td>
<td>18.75%</td>
<td>25%</td>
<td>32</td>
</tr>
<tr>
<td>Elected Members</td>
<td>20%</td>
<td>33.33%</td>
<td>46.67%</td>
<td>30</td>
</tr>
<tr>
<td>Officers</td>
<td>73.53%</td>
<td>2.94%</td>
<td>23.53%</td>
<td>34</td>
</tr>
</tbody>
</table>
## Q4

**DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS ABOUT DIGITAL STRATEGIES?**

**ANSWERED: 36   SKIPPED: 1**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>I don't know</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A digital strategy would be a useful tool in ensuring that we make best use of digital technology in our organisation</td>
<td>0%</td>
<td>2.86%</td>
<td>5.71%</td>
<td>60%</td>
<td>31.43%</td>
<td>35</td>
</tr>
<tr>
<td>Digital developments form a key part of our management strategy</td>
<td>2.86%</td>
<td>20%</td>
<td>5.71%</td>
<td>48.57%</td>
<td>22.86%</td>
<td>35</td>
</tr>
<tr>
<td>My organisation is ready to embrace the opportunities that digital brings</td>
<td>0%</td>
<td>27.78%</td>
<td>25%</td>
<td>38.89%</td>
<td>8.33%</td>
<td>36</td>
</tr>
</tbody>
</table>
Q5 WHAT, IF ANYTHING, IS HOLDING BACK DIGITAL DEVELOPMENT IN YOUR ORGANISATION RIGHT NOW?

ANSWERED: 34  SKIPPED: 3

<table>
<thead>
<tr>
<th>Issue</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>I don't know (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legacy systems and ICT infrastructure</td>
<td>67.65%</td>
<td>14.71%</td>
<td>17.65%</td>
<td>34</td>
</tr>
<tr>
<td>Lack of funding</td>
<td>79.41%</td>
<td>8.82%</td>
<td>11.76%</td>
<td>34</td>
</tr>
<tr>
<td>Culturally uncomfortable for the organisation</td>
<td>42.42%</td>
<td>39.39%</td>
<td>18.18%</td>
<td>33</td>
</tr>
<tr>
<td>Resistance to change</td>
<td>44.12%</td>
<td>41.18%</td>
<td>14.71%</td>
<td>34</td>
</tr>
<tr>
<td>Lack of leadership</td>
<td>38.24%</td>
<td>47.06%</td>
<td>14.71%</td>
<td>34</td>
</tr>
<tr>
<td>Inflexible procurement processes</td>
<td>26.47%</td>
<td>29.41%</td>
<td>44.12%</td>
<td>34</td>
</tr>
<tr>
<td>Lack of in-house digital skills</td>
<td>47.06%</td>
<td>38.24%</td>
<td>14.71%</td>
<td>34</td>
</tr>
<tr>
<td>Poor local broadband access</td>
<td>32.35%</td>
<td>32.35%</td>
<td>35.29%</td>
<td>34</td>
</tr>
<tr>
<td>Lack of evidence of user need</td>
<td>20.59%</td>
<td>47.06%</td>
<td>32.35%</td>
<td>34</td>
</tr>
<tr>
<td>Lack of buy in from senior management</td>
<td>38.24%</td>
<td>20.59%</td>
<td>41.18%</td>
<td>34</td>
</tr>
<tr>
<td>Inability to market community take up of digital services</td>
<td>5.88%</td>
<td>52.94%</td>
<td>41.18%</td>
<td>34</td>
</tr>
<tr>
<td>Nothing!</td>
<td>10%</td>
<td>60%</td>
<td>30%</td>
<td>30</td>
</tr>
</tbody>
</table>
**Q6**

**WHAT ARE THE PRACTICAL WAYS THAT THE CITY OF GREATER GEELONG CAN HELP YOU TAKE ADVANTAGE OF DIGITAL OPPORTUNITIES?**

<table>
<thead>
<tr>
<th>#</th>
<th>Responses</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Willingness to think outside the square of what we currently do, willingness to be more creative and not constrained by how we have always done things, allowing greater access to manage content online, provide a more coordinated approach across the organisation.</td>
<td>12/20/2013 3:12 PM</td>
</tr>
<tr>
<td>2</td>
<td>Compulsory workshops on what's available and how it needs to be used.</td>
<td>12/17/2013 10:20 AM</td>
</tr>
<tr>
<td>3</td>
<td>Define what a digital strategy is. Create a survey that is not bias. Actively engage with stakeholders to create the catalyst for change (I don't think the current methodology does this). The metrics for support needs to be established, is return on investment, etc.</td>
<td>12/16/2013 3:24 PM</td>
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<td>4</td>
<td>Training. Explaining exactly what the &quot;digital opportunities&quot; are for Local Government! Anecdotal evidence suggests that a great deal of productive time is actually lost by people using digital technologies and &quot;apps&quot; that do not contribute to any &quot;real outcomes&quot; for anyone or anything.</td>
<td>12/16/2013 10:25 AM</td>
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<td>5</td>
<td>Investment in relevant technologies and development of appropriate resources.</td>
<td>12/16/2013 9:54 AM</td>
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<td>6</td>
<td>Involvement in development of a digital strategy to find out what the issues and opportunities are.</td>
<td>12/16/2013 7:28 AM</td>
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<td>7</td>
<td>Ensure adequate hardware and accessibility to digital tools to make significant improvements (at fairly low cost).</td>
<td>12/15/2013 7:33 PM</td>
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<td>8</td>
<td>Keep things simple, even the jargon in this survey isn't plain English. We should never think that digital tools and solutions will replace human to human interaction and great service internally and externally.</td>
<td>12/13/2013 11:03 PM</td>
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<td>9</td>
<td>Cross departmental strategy.</td>
<td>12/13/2013 10:47 PM</td>
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<td>10</td>
<td>Improved internet speed access to new software greater access to websites e.g Youtube speakers up to date equipment and integrated telephone systems email addresses for all Council staff.</td>
<td>12/13/2013 3:47 PM</td>
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<td>11</td>
<td>Keep this on the radar to ensure we get there one day!</td>
<td>12/13/2013 3:28 PM</td>
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<td>12</td>
<td>Work from home capability. Appropriate funding for ICT. More staff for development. Stronger focus on application design and documentation. Senior staff enabling ICT staff to get the job done. Stronger focus on user requirements and documentation. Embracing user centred design as an integrated process. Less &quot;do this&quot; from senior representatives who have little understanding of the capabilities available and more &quot;how do approach this?&quot;. Use the official geelong.city.vic.gov.au domain instead of geelongaustralia.com.au to prevent confusion with the public. (or at least both - all payment services should be under .gov). More advertising of digital services. Support for small IT businesses in the local area through grants, competitions, think tanks, hosting of developer events, etc.</td>
<td>12/13/2013 3:27 PM</td>
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<td>13</td>
<td>a little more pressure from above for managers and general managers to embrace digital technologies would be helpful.</td>
<td>12/13/2013 3:27 PM</td>
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<td>14</td>
<td>Provide more education and resources.</td>
<td>12/13/2013 3:18 PM</td>
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<td>15</td>
<td>Explaining what is meant by digital opportunities. Twitter, Social Networking for all businesses, video conferences, software packages or is it something new; or a combination of existing communication technologies? Higher Broad band speeds or smart phone technology improvements; What is it we are trying to achieve here because it seems vague at this point in time and new technology in this area is constantly evolving and not necessarily created or driven by Council. We introduce a digital system one week and the next it is obsolete. People and organisations evolve with the technology change; they don't drive it so I can't help but feel that a strategy will be difficult to keep current as new, better, faster and more powerful devices come to the market. More information and detail will be good.</td>
<td>12/13/2013 2:58 PM</td>
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<td>16</td>
<td>Give individual units the confidence and freedom to build digital opportunities with resources to support this approach.</td>
<td>12/13/2013 2:43 PM</td>
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<td>17</td>
<td>Use of cloud for project development, with built in escalation for inaction.</td>
<td>12/13/2013 2:29 PM</td>
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<td>18</td>
<td>Allow access to web sites to enable our people to do their jobs properly.</td>
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<td>19</td>
<td>Provide the skilled resources for this to happen. Lack of leadership, lack of funding, resistance to change. Cogg has a very poor mindset regarding digital opportunities.</td>
<td>12/13/2013 2:22 PM</td>
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<tr>
<td>20</td>
<td>Funding</td>
<td>12/13/2013 2:19 PM</td>
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