iCounty & Digital Roadmap



Foreword

I am thrilled to introduce to you the next stage in the evolution of Monmouthshire's digital journey – iCounty and the Digital Roadmap. Together, they represent a framework that will enable the county to assert its role as a digital leader, reinforcing our commitment to delivering next generation infrastructure, connected communities and a highly skilled workforce.

For us, technology is synonymous with innovation and enterprise, both in terms of our desire within the Council to grow an enterprise culture that enables greater efficiency and effectiveness; and, in our external focus to accelerate business growth, entrepreneurship and job creation. We see a unique opportunity to deliver contemporary infrastructure that genuinely embraces open government, data-led decision making and better customer insight. This will provide the foundations to enable us to cross the digital divide that exists within some communities, accelerating economic growth and making our county vibrant, livable and investable.

We know that Monmouthshire's social capital is strong and we want to unlock the potential that exists to work with communities, residents and businesses to develop creative solutions to some of our biggest collective challenges. The Digital Roadmap is an engagement tool between the Council and community and will enable us to work together to utilize and optimize technology as a key means of building sustainable and resilient communities in which businesses thrive and people are engaged, empowered and enterprising. Technology can help us take advantage of everything our spectacular county has to offer now and in the future. Our Digital Roadmap is therefore a starting point for a conversation and we invite you to submit ideas, observations and improvements at www.monmouthshire.gov.uk/digitalroadmap.

I look forward to connecting with you.

Cllr Bob Greenland

Deputy Leader and Cabinet Member for Innovation and Enterprise



Introduction

Monmouthshire's Single Integrated Plan has at its heart, a vision to 'build sustainable and resilient communities'. In making its contribution to delivering this county-wide goal, Monmouthshire County Council is learning to lean in to communities in order to better understand 'what matters?' – local needs and priorities and, 'what exists?' – local ideas, talents, assets and opportunities.

Such insights are enabling us to develop more purposeful and sustainable ways of designing and delivering services in partnership with local people. Monmouthshire may be the lowest funded Council in Wales per head of population, but it is rich in social capital and we want to encourage civic innovation.

Increasingly central to this process of opening up our Council and delivering more radical forms of efficiency and effectiveness is the significant role and contribution of technology. A unique opportunity exists to fundamentally re-purpose services, places and relationships through clever and custom-designed technology.

We live in the age of ubiquitous technology that every minute, races ahead with new products, methods and capabilities. In addition, our dependency as a society on technology is increasing and we need to grow the talent that will enable us to fulfill this demand. For our Council, technology is therefore, much more than just a necessary component of achieving the 'direct service' part of our mission. Technology, deployed intelligently and strategically, can help us increase operational efficiency; extend our reach to achieve more meaningful community engagement; make smarter decisions; see problems before they occur; clearly measure our impact; and, provide the platform for the development of vibrant and connected communities wherein the relevance of technology is recognised and optimised by and for all.

Moving from a traditional 'provider-led' model of public service to becoming more hands-off pragmatic enablers, needs leading-edge technology that can transform our organization and better inform and empower our customers. Combining 'next generation' infrastructure with opportunities to build connected and capable communities that grow the potential to develop solutions to problems is the core focus of our strategy.

iCounty sets out our ambitious aims for technology development in the long-term. Whilst priorities and specific deliverables may change over time, this strategy provides our Digital Roadmap with a long-term vision and focus to help us achieve greater impact for our place, people and future. The initiatives in the Digital Roadmap chart a course to realising Monmouthshire's potential as a space in which technology is a driver for inclusion, business growth, engagement and opportunity for all.



Key pillars

iCounty is a public-private strategy. It provides a direction of travel for Monmouthshire in relation to its digital ambitions and a platform from which we can identify the partners and entities which are best placed to play their part in delivering our various priorities. As well as recognising the need to focus on today's issues and priorities, iCounty is about future-gazing and imagining the evolution of our county ten years' hence and creating a set of guiding principles that will stand the test of time. With high levels of growth in our knowledge-based and creative industry sectors, there is a unique opportunity to become the UK-hub for digital development and inclusion. iCounty clearly resonates with the Council's three priorities of investing in education, protecting the vulnerable and promoting economic growth and job creation, and is explicitly built around three key pillars:

- 1. Improving internal systems, data delivery and infrastructure in order to continually reinvent the services that matter most to our communities and demonstrate the path we're on to becoming an open, nimble and effective Council.
- 2. Digitally enabled, inclusive and connected communities that recognise the increasing relevance of technology and work with the Council to solve problems in order to improve quality of life, position people for jobs of the future and stimulate participation in public life.
- **3. Creating products and commercial assets** to realise potential commercial product offerings and support the expansion and creation of local digital clusters.

Vision

To become one of the UK's most inspiring spaces for digital advancement; an icounty characterized by a growing digital economy, a smarter public service and a stronger and more networked society.

The accompanying Digital Roadmap acts as a progress planner and record and highlights the initiatives, projects and activities – linked to the above three core pillars – that will enable Monmouthshire to realise its vision. Some of the activities and projects are foundational in that they provide for the essential infrastructure needed to support growth and new opportunity. Others will mean going back to basics and looking closely at all current services and capacity to ensure they are fit for the future. As we make progress, we will see that increasingly, activity will be growth focused and targeted at exploiting enterprise opportunities. By committing to the Digital Roadmap, we will be able to:



- Reclaim control of internal ICT services and provision through building products around our user needs that are of the highest quality
- Build software development capability that sets a new standard for public services
- Achieve sustainable efficiencies through savings on license fees and 'upgrade' costs
- Create new recurring revenue streams from products we create that might have relevance in the wider public service sphere
- Automate all manual and repetitive tasks, enabling our workforce to work in 'real-time'
- Make informed decisions based on accurate and up-to-the-minute joined-up datasets
- Understand and prepare for what the future holds around predictive technology
- Provide engaging and personalized experiences to the public
- Grow the local creative and technology sector, preparing and positioning our communities for jobs of the future
- Accelerate an enterprise culture, enhance quality of life and provide increased digital access and skills
- Grow a Science, Technology, Engineering and Mathematics (STEM) workforce and encourage communities to develop digital solutions to some of our most pressing challenges.

Fulfilling our potential

We live in the age of the digital society. Current, but already out-of-date estimates, suggest that more than 1 billion people are on Facebook; somewhere in the region of 400 million tweets are sent every day; social media is the number one activity on the web; every two seconds someone joins LinkedIn and children under the age of two have 'digital shadows'. Engagement with digital technology isn't just the preserve of younger generations either – grandparents are now the fastest growing demographic on Twitter. Social networking has proven to be the biggest shift since the Industrial Revolution. In four US states the Google self-drive car is already licensed and has traveled over 500,000 miles without accident and Amazon Prime Air is set to further revolutionise the way we shop.

The power of technology is such that we no longer have to find products and services – they find us. Technology is an enabler, a tool that helps whole societies, cultures and individuals to realise potential. It enables us to work together, be efficient and effective, interact with data and new products, engage meaningfully and in real-time and unlock opportunity – wherever it exists – to optimise quality of life outcomes. In Monmouthshire, we need to use technology to connect, adapt, be as productive as possible and make our space livable and investable.



Technology increasingly enables residents, businesses, the Council and other organizations, groups and services, to take advantage of everything our county has to offer – Your County, Your Way.

Monmouthshire's economy is built predominantly on Small to Medium-sized Enterprises, representing the key sectors of Tourism, Agriculture, Food and Recreation. Technology – as well as an emerging growth sector in its own right – can help heighten the relevance of these traditional industries and sectors. Our strong and active civic society is testament to the growing impetus around social innovation, however, more than 50% of our population lives in communities fewer in number than 2,500. Essential infrastructure that allows residents to access the Internet not only generates higher levels of facilitates higher degrees of interaction and inclusion, it can help grow the knowledge and skills needed in current and future employment markets.

A smart population supports growth of a skilled workforce, which creates opportunities for inward investment, and indigenous growth. Our environment and unique cultural heritage attracts many hundreds of thousands of visitors – but mainly from within the UK. MonmouthpediA – the world's first 'wiki-town' has given us a taste of what happens when technology opens up our space and word of mouth goes global.

We know from experience, that when the Council applies technology to its operations and services, we enhance our core value-base through maximising openness, a sense of teamwork, co-operation and flexibility. Through key technological developments we are able to improve business processes, reduce operating costs, drive up the potential for income generation and understand our residents better, providing them with the tools to engage their networks; personalize their experience and enjoy the systems and services that respond to their needs.

Understanding, why?

The Digital Roadmap sets out what we are going to do in and how we are going to do it. iCounty focuses primarily on conveying WHY we have embarked upon this approach and starts to provide a flavor of some of the key delivery themes:

- To become a high performing organization. This will involve:
 - Reducing dependency on legacy and proprietorial systems
 - Creating world-class internal development capacity
 - Building common technology platforms
 - Strategically aligning IT investments through consolidation, standardization and simplification



- To produce new insights and intelligence from near or real-time 'open data' for key services to perform better as a result of:
 - The ability to make evidence based decisions
 - Automating slow and repetitive processes
 - Improving monitoring and control through on-demand reporting
 - Consolidating digital content platforms
- To promote and invest in the local talent pool. This will require:
 - Growing a local STEM network
 - Increasing take-up of computer science related courses and training
 - Focusing economic development strategies on the potential for growth in the digital and creative industries sectors
- To increase public engagement and social networks to create more opportunities for digital inclusion and working together, by:
 - Providing greater access to digital utilities
 - Encouraging digital inclusion through maximizing use of facilities and services in public outlets and working with partners like local Credit Unions and Housing Associations to make available older equipment at significantly discounted rates
 - Promoting council openness through citizen access to useable information and enabling residents to submit their ideas, requests and concerns
- To expand local infrastructure capacity for public services and underserved members of the public and enterprise community. This will include:
 - Making available broadband for all and free Council sponsored wi-fi zones
 - Building new cloud models for enterprise and government
 - Promoting technology-rich learning in all our schools and learning zones and embedding within our 21st Century Schools' Programme
 - Rolling-out Bring Your Own Device
- To build products for our own use that have the potential for commercial growth
 - Maximizing the potential for income generation
 - Demonstrating and exemplifying the future of digital public services
 - Illustrating that custom-built products can be more cost-efficient and deliver better customer outcomes





The themes identified in the Roadmap are closely inter-connected and a sequence has been determined based on the need to build the essential foundations ahead of growth and advancement. Commercialization and productisation are seen as bi-products of strong foundations, sustainable growth and a desire to firstly and fundamentally, improve digital leadership in public services. Many of the programmes, projects and activities in the Digital Roadmap activities are captured within the key priorities and themes below:

1. Improving internal systems, data and infrastructure

In order to provide our communities and County with leading-edge digital services and to create game-changing products, it is vital that modern infrastructure and systems are in place that, enable the Council and its agile workforce to deliver the iCounty vision. This will include:

Launching the Digital Roadmap concept

The digital roadmap is the 'live' action plan that accompanies the strategy. To be successful, the Roadmap, its goals, activity and operations, need to be distilled across the organization and its network. As investment is required or re-prioritised, governance will become critical and a robust but straightforward approach needs to be taken to supporting the Roadmap activities.

Developing effective systems and infrastructure

Across the organization, we have examples of expensive legacy systems, duplication of business logic and disparate data models. This collectively can lead to data loss, inefficiency, manual effort and above all, high maintenance and support costs. Reviewing this history will enable us to reduce costs, make more intelligent use of data and provide greater insights across service areas.

Reducing reliance on costly legacy systems

Conventional practice within the public sector often sees technology largely purchased from established software vendors. This has resulted in cases where expensive systems are made even more costly by license fees and upgrades. This often deems systems unfit for purpose and impossible to upgrade without incurring additional outlay. We want to explore the opportunity to become more self-sufficient, through reinvesting some of the costs associated with such contracts, in building our own bespoke software solutions.

Reviewing Shared Resource Services (SRS)

In conjunction with partners Torfaen CBC and Gwent Police we are currently midway through



a strategic review of SRS. This is focused on three major areas: re-defining our 'core service needs'; re-purposing governance structures and testing the business model in order to demonstrate clear Returns on Investment. We fully expect the review of SRS to build on the themes highlighted in this strategy and clearly identify the contribution of SRS in delivering the relevant services, projects and core activities set out in the Roadmap.

Open Government

We are working to become more efficient and effective across service areas by aiming to gather, publish and evaluate data to improve our processes, services and decision-making. Ensuring our decisions are evidence—based will help us reduce costs and importantly, offer the kinds of services our communities actually want to receive. We will continually aim to use technology to optimise our relationship to residents and provide services in a more relevant, viable and timely way.

2. Digitally enabled and inclusive smart communities

As a vehicle for delivery, the Digital Roadmap is a community-focused tool that seeks to deliver real benefits and quality of life improvements to local people. We want to design engaging digital services that enable outstanding customer care and empower people to get the most out of their interactions with the Council and their communities.

Increasing community engagement

Digital exclusion exists in Monmouthshire. Access to universal broadband is restricted and whilst this might be part-addressed through the roll-out of Superfast Cymru and options exist to connect smaller rural communities that are currently 'off the radar' – opportunities exist to encourage local people to utilise digital mechanisms to enable 'self-service'. We will work with our communities to provide support and where appropriate investment, to make it as easy as possible to perform key tasks and obtain information.

Providing effective near/real-time open data

An essential function of our Council is to provide the public, regulators and policy-makers with relevant and timely information. Currently a significant amount of time and resource goes into making data available – yet this is not optimized. The Roadmap sets an objective to provide a new 'linked' platform that can extract information from multiple data sources. This will enable the construction of tool that could provide real or near real-time data to our public enabling developers to make use of our data to solve problem and potentially create new income opportunities.



Promoting computer science and coding

It is well documented that there is a global and local shortage of computer coders with which to sustain the ever-growing demand. In order to tackle this issue, we want to go back to grass-roots and to teach children to code from a young age and work progressively with them through the education system and beyond. We are aiming to create models and initiatives that could be adopted nationally and to begin implementation of the thought-leading ideas identified in the national ICT Report for Welsh Government.

Engagement with local industry

Investing in local talent can help future-proof local industry. However without an eco-system of creative-sector businesses; digital specialists will have no option but to find work outside of our county. We want to make best use of the local skills that exist to help foster new and innovative start-ups. It is a key principle of the Roadmap that we utilise local talent to deliver aims, in order to create the kinds of local networks that grow and prosper.

Contribution of CMC2

As our own company, CMC2 has an integral role to play in contributing to delivery of iCounty. CMC2 is building its competency in software development, creating new customized packages and working with services to develop solutions to specific challenges. Technology plays a key role in helping re-purpose and future-proof public services and CMC2 is growing its development function in order to fulfill the demand for specialist strategic advice and best practice support. In addition, closer links are being forged with communities and businesses in order to understand how technology can increase our economic competitiveness and community resilience.

3. Creating products and commercial assets

There are significant opportunities to exploit the potential for new products that generate recurring revenue streams. Given the potential for CMC2 to play a significant role in developing products that enable service and system redesign, there is an opportunity to create products that solve critical internal problems, which could then be sold on to other organisations.

Developing commercial products

We will aim to solve problems within the organisation with custom-built software. If these prove successful, there will be opportunities to onward sell them via CMC2, should conditions allow. In addition to reducing reliance on costly proprietorial software, we can build new



revenue streams and a new type of development capability.

Launching start-up incubators

It may be beneficial in some cases to use existing products developed by local businesses. There are opportunities to work with small start-ups to support development of ideas and product prototypes. We will aim to establish a start-up incubator, that will seek to spawn a new generation of successful products and businesses. One model might be to provide coaching, mentoring and investment in exchange for equity shares in new products, systems and services. Such a 'Future Public Services' digital development zone could establish our profile as a creative hub in the region.

Addressing the growing skills gap

Coupled with the 'grass-roots plan' for tackling computer science skills, we must also support existing businesses to improve their skills and provide the appropriate resources and training schemes, to allow them to compete successfully in the global marketplace. We will aim to provide specific developmental support to enable delivery of increased Return on Investment for local industry. Tech meetings, hack-days, training funds and mentoring are just a few of the options we will consider to address the skills gap.

Making Good Decisions

The current ICT Programme Board is set to be refreshed to enable a robust governance structure that empowers and liberates the enablers, animators and deliverers of iCounty. The board will be responsible for strategic oversight of the Strategy and Digital Roadmap and in a highly disciplined but light-touch way, will:

- Ensure the appropriate linkages across the three strands of iCounty
- Oversee the resourcing of key programmes that underpin the strategy and mobilizing the talent both within and outside of the organization to help deliver them
- Connect and align other partnerships boards and groups SRS, EAS, CMC2 and community based initiatives
- Develop effective policies and frameworks that enable the strategy to flourish and continually grow its effectiveness
- Identify gaps in the market and exploit them through innovation and enterprise
- Connect strategic direction with operational development and capacity
- Monitor, manage and mitigate risk and feedback loops so that failure is embraced as a learning tool



It is proposed that Members of the Programme Board will comprise the relevant cabinet members, alongside the Chief Officer, service head, finance manager and SRS and CMC2 colleagues as well as external experts and other interested parties who can be co-opted as required.

Measures and markers of success

To ensure the County benefits from opportunities for involvement, information and inclusion through technology, we will work with the enterprise community, other public service partners, the community sector and residents to implement the activities and projects set out within the Digital Roadmap. While some of partnerships will require greater time and investment, the opportunity to achieve scale and build critical mass means a greater payoff.

The following Performance Measures, set out by area of impact, will be used to track and evaluate the success of iCounty over time.

1. EFFICIENCY AND EFFECTIVENESS

- % cost savings business efficiency achieved
- % Increased revenue generation
- % of internal systems re-built & redesigned
- Estimate of net value added

2. SERVICES

- Numbers of council produced data-sets and tools available to public
- Number of council related apps produced and available
- Increase in customer satisfaction
- Increase in response times for digitally reported issues
- % increase in use of digital services
- Number of issues resolved using social media

3. ENGAGEMENT

- No of open data-sets available for public use
- No of residents using web based services
- Level of social media interaction
- % increase in web hits
- Number of county-based digital partnerships and schemes



4. ACCESS

- No of free public wi-fi hotspots
- No and use of free agile working centres
- No of residents using free Council-provided wi-fi
- Community broadband schemes complete
- % of residents with internet at home/ business
- average county-wide broadband speed
- No of residents with access to technology
- Number of students with access to technology at school
- No of students involved in STEM

5. SKILLS AND JOBS

- No of residents receiving formal digital training
- No of residents using a PC or mobile device at home
- No of social media accounts in the county
- Number of tweets sent from accounts in the county
- Average salary level
- % growth in creative and knowledge based sectors
- Level of overall economic resilience



Conclusion

'In a virtual world of infinite abundance, only creativity could be in short supply' Jaron Lanier, Who Owns the Future? 2013

iCounty focuses on creating the conditions for Monmouthshire to maximize the contribution of technology to delivering sustainable and resilient communities. Technology has limitless capabilities and whilst investment, resources and infrastructure are all critical in building Monmouthshire's future as an iCounty – what Monmouthshire can offer technology is arguably of greater significance. As a county rich in ideas, skills, assets and social capital, unique potential exists to create something special. Empowering people to work together, access data and information, pursue new opportunities and ways of working and make great things happen will help ensure Monmouthhsire becomes more connected, networked, innovative and genuinely community-led. As a relatively small community, we have an opportunity to demonstrate why speed and agility should be favoured over size and scale. As a contemporary Council, we have an opportunity to show that technology can achieve horizontal networks that empower people and supersede conventional networks and hierarchy. As an creative County, we have an opportunity to constantly accelerate social, economic and environmental progress driven by rapid technological advancement.

iCounty cannot be a strategy that sits on a shelf – it must be live, dynamic and embody its values. To make it so, we need your input. How can you use your ideas, talents and resources to enable Monmouthshire to become an iCounty? Whether you are a STEM professional, technology entrepreneur, gaming addict, an 8 year old 'born digital' or simply have an insatiable hunger for technology and how it could build a better Monmouthshire, then we need to hear from you. iCounty is the start of our conversation with you about a shared digital future and we want to hear all contributions, ideas and suggestions no matter how big or small at www.monmouthshire.gov.uk/digitalroadmap. Our work to date has taught us that the power of digital to catalyze progress is limited only by the power of the human mind. So we need lots of minds - and hearts too - because we want an iCounty as spectacular and awe-inspiring as its backdrop.





