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Digital Wales: A Review of Delivery 2013-2014



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Ministerial Foreword

Digital Wales is the Welsh Government's long term strategy for making Wales a truly digital nation. It sets out five key objectives - to tackle the digital divide, to improve digital skills, to grow our digital economy, to provide better online public services and to deliver faster broadband across Wales.

We have made substantial progress in all areas but this is a complex and fast moving agenda in which activity across all five themes is highly cross-cutting.

We have made real progress in tackling digital exclusion over the last 3 years with the percentage of adults in Wales, 'not regularly using the internet', falling from 34% in 2010 to 21% in May 2014. The revised digital inclusion plan sets ambitious new targets for the next three years and for the first time extends Communities 2.0 beyond the convergence areas, creating a national programme that can take the excellent work being done by countless organisations to all parts of Wales.

The digital economy has continued to grow throughout the downturn. It accounts for some 55% of UK GVA and technology will underpin the majority of future job creation across all sectors of our economy. Encouragingly, the percentage of SMEs in Wales with a website has increased from under 50% in 2004 to 72% in 2014 with a majority (81%) using the internet to order goods and services. However, we still need to help our businesses make more sophisticated use of the internet as only a minority of them are using the internet for marketing and sales, or integrating digital capabilities into their core processes.

To support this growth it is vital we ensure the supply of people with digital skills into all parts of the economy. The new Skills Implementation Plan announced in July prioritises the improvement of ICT skills of working adults to at least level 2. Through the Learning in Digital Wales Grant over £39 million has been invested in uplifting the internet connection to our schools.

In July 2014 the Welsh Government published "Devolution, Democracy & Delivery: Improving public services for people in Wales" a response to the report from the Commission on Public Service Governance & Delivery. This outlined the vision for improved public services in Wales and actions we will take to deliver this.

The Welsh Government strongly supports the Commission's recommendations for working together more broadly and acting as 'one public service' rather than separate organisations. As part of this we have committed to taking forward the recommendation from the Commission on improving digital services. We are developing a national digital strategy which will help address barriers such as the need for common standards and a strong digital leadership to deliver efficient and effective digital public services across Wales.

I want Wales to be the first part of the UK to tackle these barriers and in doing so transform the delivery of local online services. This will make Wales one of the best and most innovative providers of online services in the world.

I can report that the roll-out of Superfast Cymru, which began in January 2013, has already reached in excess of 278,000 premises and we are on target to enable 480,000 premises by Spring 2015. The roll-out has created over 250 new skilled jobs, over 110 new apprenticeships, is providing work experience opportunities for 900 people and protects over 300 existing jobs in Wales.

Going forward, the challenge facing us all is the need to rapidly exploit our infrastructure investment. Making Wales one of the best connected countries in the world is just the start. The time is right to build on this infrastructure to grow our economy, to expand R&D and innovation, to transform public services and to improve the lives and prospects of the people of Wales as we deliver a truly digital nation.

**Julie James AM,
Deputy Minister for Skills and
Technology**

Digital Inclusion

An inclusive, sustainable and prosperous society

Digital inclusion remains a real and pressing issue both within Wales and across the UK. Digital exclusion can reinforce social and financial exclusion and the continuous development of new technologies can introduce new types of exclusion. The Digital Agenda for Europe¹ calls for a halving of the proportion of the population that has never used the internet (to 15%) by 2015. The most recent National survey for Wales to March 2014 shows that 18% of the people in Wales have never used the internet and we aim to reduce digital exclusion, based on regular use, to 13% by 2017.

Our Objectives

Digital Wales recognises the importance of ensuring that strategies and initiatives, whether for growth, public service delivery, tackling poverty or independent living, take into account the importance of digital inclusion. Its objectives seek to develop a holistic approach to reduce the number of digitally excluded people in four priority groups (older people, unemployed and economically inactive, social housing tenants and disabled people) by:-

- (i) building delivery partnerships across the private, public and third sectors
- (ii) providing free community access to ICT and the internet to all four priority groups
- (iii) developing ICT skills and digital literacy across all four priority groups
- (iv) reducing digital exclusion across all four priority groups

How are we doing?

(i) Building delivery partnerships across the private, public and third sectors

This year the Communities 2.0 programme has built new partnerships with various private sector organisations to explore ways they can share resources, people and venues, to further support the digital inclusion agenda. New partnerships have included:

- Communities 2.0 outreach workers partnering alongside Barclays Bank's Digital Eagles staff to assist both customers and non customers in branches and community venues to use the internet and digital technologies.
- Working with Asda to deliver digital inclusion sessions in stores thereby reaching people that might not attend traditional community venues.
- Developing partnerships with the telecommunications companies including BT, through their *Get IT Together* initiative; Everything Everywhere (EE) to maximise the impact of their '*Techy Tea Parties*'; and with the mobile provider 'Three' who have supplied free mobile Wi-Fi devices (mi-fi's) to assist with digital inclusion activities in rural areas.

Sharing good practice through groups such as the Libraries, JobCentre Plus and Communities 2.0 liaison group has generated much greater collaboration between stakeholders and partners. This has given rise to a number of new collaborative initiatives adopting a multi-agency approach, e.g. supporting Job Centre Plus clients to use the internet so that they can meet their claiming requirements by searching and applying for jobs online; and the Post Office signposting people to local internet access points and learning centres.

(ii) Providing free access to ICT and the internet to all four priority groups

Our libraries continue to provide free access to the internet. Communities 2.0 has helped to increase the number of free ICT sessions available in libraries as well as supporting existing library staff to assist users, particularly older people and people with disabilities, in accessing the internet.

There have been 1,600 referrals, to free internet enabled centres across Wales, through 400 Post Offices. Communities 2.0 and Post Offices in Wales have helped people access computer courses and sign-post to drop-in centres across Wales which provide free internet access.

Free Wi-Fi continues to be made available in public and private sector buildings across Wales. Local Authorities are now exploring how free Wi-Fi helps their citizens and visitors access public services and information. Monmouth Council has provided free Wi-Fi in the town to allow visitors to access the wealth of tourist information that has been made available through their Monmouthpaedia project.

(iii) Developing ICT skills and digital literacy across all four priority groups

The latest findings from the 2013/14 National Survey for Walesⁱⁱ indicate that 31% of adults aged between 45 and 64 who do not use the internet say it is because of a lack of skills, an increase of 6% since the previous survey. This echoes the UK Government Digital Inclusion Strategy, published in April 2014 which suggested that 21% of adults lack basic online skills.

Digital skills and digital literacy, especially in our deprived areas, will become increasingly important as more public services such as Universal Jobmatch and

Universal Credit are delivered primarily online.

National initiatives specifically aimed at reducing digital exclusion levels amongst the four priority groups include:

- Shelter Cymru, who have been helped by Communities 2.0 to train frontline staff and help embed digital inclusion in its homelessness prevention work to assist clients with the digital elements of the welfare reforms. The initiative aims to support over 1,600 individuals and staff to gain the benefits of going online.
- Get Connected, led by Royal National Institute for the Blind, who have delivered awareness and training sessions to help people with impaired vision gain the benefits of digital inclusion. These sessions demonstrate how to make use of various technologies to access the internet and use other digital technologies such as mobile phones, tablet computers and eBook readers. Through the Get Connected project, over 1,400 individuals have been supported.
- Disability Wales who have established the 'Digital Lives' initiative. This initiative aims to provide digital inclusion training and support to disabled individuals and disability organisations across Wales. Through this work the e-Accessibility Forum has been set up, which aims to find ways to support disabled people to take advantage of the benefits of digital technology and the internet. The forum is made up of representatives from organisations that support disabled people.
- Leonard Cheshire Disability who provide personalised and practical support to ensure that disabled people in Wales can access digital

technologies. They are currently supporting people with accessible IT, assistive technologies and communication. They also provide assistive technology and access to IT provision within some of their residential services. Clients can attend their 'Discover IT Centre' based in Cwmbwrla Day Centre, Swansea where they have an assessment, receive training and are supported to use the appropriate adaptive hardware/software as well as access online learning in core subjects such as English, Maths and employability skills. Clients are also able to apply for equipment to use within their homes through the Discover IT @Home project.

(iv) Reducing digital exclusion across all four priority groups

Communities 2.0 have directly supported over 47,000 individuals to get online, with significantly more indirectly supported. In January 2014, this Programme was extended to the four remaining non-convergence areas of Wales not previously covered by the Programme; Cardiff, Newport, Monmouthshire and Vale of Glamorgan. This has allowed the Programme to deliver a national pan-Wales approach to tackling digital exclusion.

Our headline target to reduce digital exclusion amongst adults from 34% in 2010 to 25% by 2015 has already been achieved. The 2013/14 National Survey for Wales indicates that digital exclusion (those not regularly using the internet) amongst adults in Wales has now fallen to 21%.

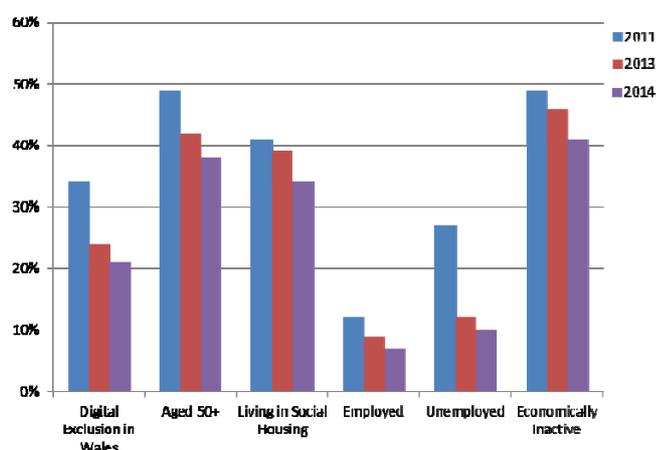
Successes highlighted in the survey showed that more older people (aged 50 and over) now use the internet with digital exclusion amongst this group now at 38% (down from 49% in 2011). An improvement can also be seen in the figures for the unemployed with only 10%

digitally excluded in 2014 compared to 27% in 2011.

These findings, whilst encouraging, indicate that there is still some way to go to achieving a fully digitally inclusive society, which will become even more of a necessity as vital public services continue to move primarily online. There is also an on-going need for partnerships across the private, public and third sectors to continue to help assist those who are digitally disadvantaged to ensure they are not left behind, or feel that they are being left behind.

The need to continue the momentum is reflected in the revised Digital Inclusion Delivery Planⁱⁱⁱ published in June 2014. This revised plan includes actions and targets to further reduce digital exclusion levels to 18% by 2015 and down to 13% by 2017.

Figure 1 Digital Exclusion In Wales 2011 to 2014 and the priority groups



Digital Skills

eSkills – skilled and competent people

The 2012 *Global Information and Technology Report* by the World Economic Forum^{iv} suggests that the most important driver of economic and societal growth is not how well connected a country is to the internet but the digital ability of their citizens and business.

Our objectives

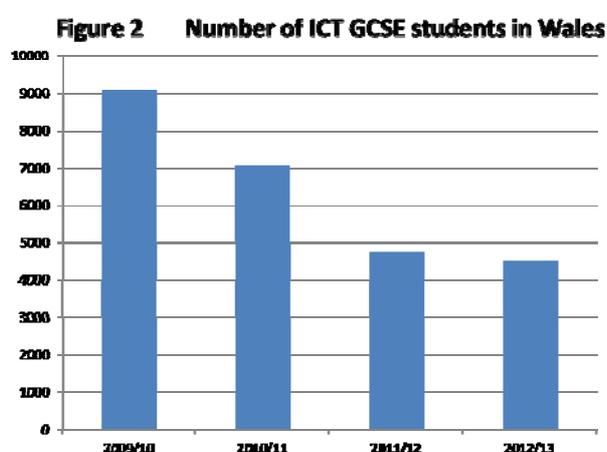
Digital Wales recognises that countries that make the best use of technology and who have the best supply of digital skills are emerging as the global winners. It sets three fundamental objectives:

- (i) improve the digital skills of children and young people
- (ii) improve the digital skills of adults
- (iii) improve the use of digital technology in education

How are we doing?

(i) Improve the digital skills of children and young people

The number of learners taking ICT GCSE in Wales has continued to decline^v.



Employers have expressed concern over the relevance of what is being taught in schools, the resultant affect on young

people being ‘switched off’ careers in the ICT sector and their lack of the necessary digital skills for the current and future jobs market.

To help address this decline Welsh Government has placed ICT skills as one of the themes of the Foundation Phase in Wales. Recognising that more needs to be done, the Minister for Education and Skills, in March 2014, announced the appointment of Professor Graham Donaldson to undertake a comprehensive, independent review of the curriculum and assessment arrangements in Wales. This review will include recommendations on the teaching of ICT. Professor Donaldson will report his findings and recommendations to the Minister at the turn of the year.

(ii) Improve the digital skills of adults

Wales is still struggling to meet the ICT needs of industry with regard to the availability of appropriately skilled recruits. e-Skills UK^{vi} estimate that optimisation of ICT by businesses could generate an additional £1.5bn GVA to the Welsh economy, which would translate into 18,000 new jobs, across many occupations and sectors, over the next 5 to 7 years. They suggest that more than 3,000 ICT trained recruits are needed each year just to meet existing demand from Wales’ growing IT sector. They further estimate that the sector will grow at double the national employment average between now and 2020.

To meet the needs of adults who are in work but want to refresh their skills Welsh Government has subsidised IT training courses through a European Structural Funds *Pathways to Digital Growth* programme. Businesses of all sizes in Wales have benefitted from high-quality online training and exam entry in areas including IT project management, IT service management, software testing and Oracle Java programming. Over 280 individuals have benefitted from this pilot

programme, with a current successful pass rate of 81.3%.

The *Pathways to Digital Employment* programme provides similar free training to adults who are currently out of work. Over 280 individuals have enrolled on this pilot programme and benefitted from training in areas such as IT development, Technical Support and Design.

The Women Adding Value to the Economy programme (WAVE) provides training in Website Design, Social Media and high value ICT Strategic Leadership skills. This European funded programme has extremely high success rates and has stimulated many participants to further their education and continue on to Masters programmes.

These training programmes are aligned with employers' needs and are designed to address current and predicted IT skills shortages in Wales.

(iii) Improve the use of digital technology in education

There has been substantial progression in improving the use of digital technology in education. Guided by the National Digital Learning Council the Welsh Government has taken forward an ambitious programme to improve school internet connectivity through the Learning in Digital Wales Grant programme and to roll out the national learning platform, Hwb, to all schools in Wales.

At end of July 2014, 987 primary schools, pupil referral units, middle schools and special schools have been connected at 10Mbps, while 179 secondary schools are connected at 100Mbps. The Welsh Government is also working with local authorities to ensure that the aspirational targets for 2020 connectivity (100Mbps for primary and special schools, 1Gbps for secondary schools) are being considered. to continue delivering improved experiences to learners in Wales.

The Hwb programme, which comprises of the National Digital Content Repository for Wales and Hwb+, is a secure online virtual learning environment which is being provided free of charge for every school in Wales. At end of July 2014, Hwb+ has been made available to 1,615 primary, special and secondary schools in Wales. Over 1,845 teachers from 1,334 schools have received training to ensure they can effectively use it.

The roll out of Hwb+ has been supported by a team of Digital Leaders, drawn from the best practitioners in Wales, with an aim to establish a network of Digital Champions in every school in Wales.

The Learning in Digital Wales programme is now supporting the use of social networking technologies in schools. Previously, local authorities had blocked access to social networking sites; however, as social networking tools became integral to day-to-day use of the internet, especially through mobile devices, the Welsh Government has concluded that a managed approach to the use of these tools would have a more beneficial effect than blocking them. Embracing the use of social technologies in education, provides an opportunity to adopt creative and engaging approaches to teaching and learning and, crucially, to guide children and young people to use these technologies safely and responsibly.

In recognising the need to develop coding skills in secondary schools across Wales, the Welsh Government is funding a series of computing workshops for teachers and learners from the start of the 2014/15 academic year. These workshops will ensure that every secondary school in Wales has at least one teacher with practical hands on experience of computer coding as well as providing an important role in encouraging young people to develop their coding skills in a range of computer languages.

Digital Economy

Competitiveness - a thriving and competitive digital economy

The digital economy accounts for over half of UK GVA and technology will underpin the majority of future job creation across all sectors of the economy^{vii}. Industry believes that future market opportunities will be led by developments in new services, platforms, data and networks and the ability of all sectors of the economy to take advantage of commercialisation opportunities. It has been estimated that those businesses that simply embrace being online grow four times faster than those that don't.

Our objectives

Recognising the importance of digital technologies and the ambition to drive economic growth and support a thriving competitive digital economy, Digital Wales sets out four principle objectives:

- (i) support all businesses to fully exploit digital technologies
- (ii) increase investment in ICT-based R&D
- (iii) support and develop the ICT sector
- (iv) support and develop the creative sector

How are we doing?

(i) Support all businesses to fully exploit digital technologies

Welsh Government's eBusiness programme, launched in April 2013, is an all Wales programme open to eligible businesses, providing them with a comprehensive baseline analysis of their current use and exploitation of ICT, in relation to their business and business processes. Since its launch 266 free diagnostics for Welsh SME's have been undertaken and the priorities identified being actioned, in the main, by the

companies themselves. For those actions that required a higher degree of technical expertise, such as complex back-office ICT systems, Welsh Government ensured a team of quality assessed advisors were available to help and reduce the risk of introduction.

Over the last year the tourism sector has introduced the Digital Tourism Business Framework (DTBF) to help its businesses exploit digital technologies.

One of the aspects of the DTBF, the ICT diagnostic service has been provided to 738 tourism businesses. A recent survey conducted on those who undertook this diagnostic has shown (from the 361 who responded):-

- a significant rise in digital maturity
- 1015 recommendations made for improving their businesses being implemented
- 71 tourism related initiatives being delivered

This has been recognised by the European Union as one of only 20 cases of innovation and good practice, which enhances the competitiveness of tourism, within the EU.

The National Library of Wales is leading on a European funded project entitled 'Digitisation for Business' that aims to assist businesses to take advantage of the digitised resources of the National Library to create new digital products and resources. Businesses have been given the tools to help them compete both locally and globally - accessing specialist advice and knowledge on a range of issues from copyright, licensing and IT, through to digital capture, digital storage and preservation of data and searching current resources.

To ensure that Wales can gain economic benefits from the significant investment being made to bring next generation broadband, Welsh Government has

piloted direct, face-to-face support to SMEs in North Wales on how they can best exploit the opportunities that superfast broadband brings them. An all-Wales programme is now being taken forward.

(ii) Increase investment in ICT-based R&D

There has been progress in the development of technology led innovation, such as:-

- A new, market-leading approach to how companies collaborate and manage innovation, the Open Innovation Programme, sponsored by Welsh Government, has been launched. This approach has allowed General Dynamics, IQE and Airbus to share development problems and processes with its Welsh supply chain, adding value all round. The companies collaborate with each other on best practice and the results are shared across the Welsh business community.
- The University of South Wales has used the Academia for Business programme (A4B), which encourages the commercialisation of knowledge between academics and businesses, to develop next-generation optical fibre communications technology. The project will deliver a product with higher capacity, increased speed and lower power consumption which will transform the telecommunications industry and the experience that the customer will receive.
- The Car insurance company Admiral has accessed SMART Cymru grant funding to develop new leads within telematics and a Swansea-based technology company, Dezrez, is working on new software management systems for estate agencies and legal conveyancing. These two ICT based R&D

investments alone have created 60 new jobs.

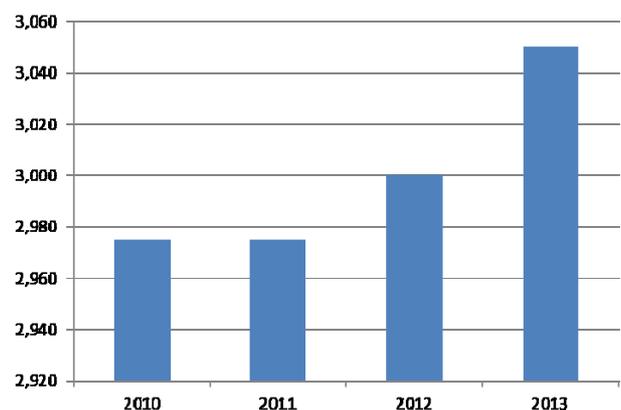
- Establishing a digital innovation company in Newport, supported by funding from the Welsh Government, which will seek to accelerate R&D opportunities through to commercialisation.

(iii) Support and develop the ICT sector

ICT remains one of the top 3 priority sectors in Wales with the highest average weekly earnings (Creative Industries £627; Advanced Materials & Manufacturing £612 and ICT - £611) that are significantly above the figure for the whole economy (£539)^{viii}.

Similarly the number of enterprises in the ICT sector saw a sustained increase of 1.6% between 2012 and 2013, a performance which is better than the Welsh Government's non-priority sectors (decrease of 1.9%) and all industries (decrease of 0.9%)^{ix}.

Figure 3 Number of ICT Enterprises active in Wales



Some key developments in this sector include:-

- The creation and safeguarding of over 3,600 high end jobs and the attraction of over £26m ICT investment to Wales, during 2011-2014.
- The investment by Ideoba at Sony UK Technology Centre, Pencoed has

brought world-class data-mining and profiling financial technology to Wales. Backed by SMARTCymru funding from Welsh Government Ideoba expect to create 100 jobs over the next 3 years.

- Digital 2014 - This flagship event hosted 4294 delegates (including online); 40 speakers; 30 exhibitors and 30 workshops.
- Digital Tuesdays – These events launched in July 2014, and held on the first Tuesday of the month, provides an informal setting for businesses to hear from industry experts, discuss the latest ICT sector developments and network with colleagues from across the digital world.
- Alacrity – Provides an innovative Graduate Entrepreneurship Programme, which is delivered in collaboration between four partners: the Welsh Government, Wesley Clover and private investors the Waterloo Foundation and Andrew Probert. The programme seeks to create new technology businesses and provide seed-funding by the Alacrity partners. The first 2 new companies were formed in June 2014 and the next cohort of graduates into Alacrity are now being recruited.

(iv) Support and develop the creative sector

The Creative Sector has seen significant interest in its Digital Development Fund (DDF). This fund, backed by Welsh Government, has attracted around 400 expressions of interest, with 58 projects so far approved for funding totalling just under £1.9 million. Through this fund companies can apply for up to £50,000 to support projects such as development of video games, new digital apps and platforms, protecting IP and developing new digital routes for the distribution of content.

The Welsh Government's Creative Sector has sponsored key events, including the *Wales Games Development Show*, *Digital Innovation Week Wales*, the *Do Lectures*, *TEDx* and a Creative Industries award at the 2014 IWA Inspire Wales Awards, which was won by games company Wales Interactive.

In February this year, Welsh Government announced an exclusive deal with Pinewood Shepperton to create a world-class new studio, Pinewood Studio Wales which will form part of Pinewood's global network of film studios. Alongside this a £30m commercial Media Investment Budget is being made available for qualifying film and high-end television production.

Transforming Public Services

Public services impact every day on every part of society from the youngest to the oldest, from individuals to families, from local business to multi-national corporations. Today, there is a growing customer expectation that services should be available online at any time, through the medium of Welsh and English, and accessible through any device.

At the same time with budgetary constraint increasing, using digital technology has the potential to realise significant savings across the public sector through channel shift, streamlining back-end business processes and by developing new services that can be reused and shared.

Our objectives

Digital Wales recognises the potential that technology has to transform the delivery of public services and sets four fundamental objectives:

- (i) increase the availability and take up of online public services
- (ii) deliver online services designed around the needs of users
- (iii) develop the infrastructure to support the move to online public services
- (iv) make more effective and efficient use of technology across the Welsh public sector

How are we doing?

(i) Increase the availability and take up of online public services

Wales is progressing steadily in the availability of online public services, with more and more services having an online element to their delivery. If, however, we want Wales to become an exemplar for

digital public service provision then this pace needs to significantly increase.

A number of examples of services that are now available online are: -

- Two thirds of all GP practices now offer online booking through the 'My Health Online' service - this makes it easier to make appointments and order repeat prescriptions;
- More than half of all patient referrals by GPs for specialist hospital care are now sent electronically and the number is increasing each month. All the referrals in Betsi Cadwaladr University Health Board are sent electronically;
- The Individual Health Record now has 84 per cent of GP records available online for use in GP out-of-hours services;
- Rural Payments Wales (RPW) provides farmers with secure access to all their documentation and applications, with the text and email notification service keeping them better informed on progress. The take up for the online Single Application Form (SAF) 2014 was 32% in its first year of operation;
- All local authorities in Wales are now delivering Telecare services. Through the Telecare Capital Grant, investment has been made of over £9m in improving telecare services across Wales with nearly 20,000 people now living more independently as a result.

Despite this steady increase in the availability of online public services, the actual take up by customers remains a key issue. The latest research from Ofcom^x suggests that whilst 71% of internet users in Wales are now purchasing goods and services online only 35% are using the internet to access

local council/government services. On a positive note, this is up significantly from just 18% in 2012, but going forward it remains a key challenge.

There are many things that public service providers can do to drive take up, ranging from better promotion and marketing to forced channel shift and incentives. For example, by simply rewording the payment information on parking tickets to promote online payment, Newport City Council increased online payments significantly.

(ii) Deliver online services designed around the needs of users

Since Digital Wales laid down the challenge of building online services that are designed around the needs of users, there has been universal agreement that this is the right approach. The UK Government's Digital Strategy (November 2012) places building user-centric services at its heart and Socitm, the professional association for public sector ICT management, produce regular guidance for local authorities on standards for usability. It is still early days in delivering against this challenge with many online public services still designed around organisational branding needs rather than user needs.

The public sector in Wales has delivered many initiatives aimed at designing services around the needs of users, for example:-

- The Arts Council of Wales (ACW) has established the Digital Research and Development Fund for the Arts in Wales (£400k), which is supported by a partnership between the Arts Council of Wales, Arts and Humanities Research Council and Nesta to support arts projects that work with digital technologies. The first innovative projects, announced in November 2013, use social media to reach out to audiences at

performances, reducing barriers to engagement and increasing enjoyment.

- Cadw has produced an 'app' which provides information about Welsh ancient monuments, supplemented by two bilingual iPhone apps which tell the story of Denbigh and Conwy castles.
- Projects such as Casgliad y Werin - People's Collection Wales is raising the profile of Welsh culture and heritage in Wales and around the world and includes online tools to create downloadable tourist trails.
- Through the Welsh Books Council, Welsh Government funds the *Golwg 360*, the on-line Welsh language daily news service, providing information to citizens. The average number of daily visits to the *Golwg 360* website continues to be in excess of 8,000.
- The Welsh Books Council is also working with publishers to increase the availability of e-books relating to Wales. As of early 2014 1,001 e-books are for sale on the Gwales site. 183 of those are Welsh Language titles, and the figure is increasing consistently.
- As a result of a collaboration between Wales Book Council and YuDu the Ap Llyfrau Cymru / Welsh Books App has been developed. This has provided a platform for book Apps in both languages from Wales and there are now, 10 titles on the site, 9 in English and one in Welsh. The Council has developed a similar scheme for Welsh magazines in both languages. Initially the scheme is being developed with three Welsh language magazines and three English magazines.
- Coflein (www.coflein.gov.uk) provides public on-line access, via text

searching and a map interface, to the National Monuments Record database, including information on over 100,000 sites and over 240,000 digital archive items (including images and documents).

- The Royal Commission on the ancient and historical monuments of Wales is involved in the Britain From Above (www.britainfromabove.org.uk) project. This is a four year project aimed at conserving 95,000 of the oldest and most fragile photographs (dating from 1919) in the Aerofilms collection. Users are encouraged to tag and add information about the images using tools on the website and to gain confidence and skills in using the internet.

(iii) Develop the infrastructure to support the move to online public services

A key component of delivering digital services to our citizens is having a secure, fast and reliable communications network. In today's economic climate it is also essential that we deliver these services in an efficient and cost effective way.

Public Sector Broadband Aggregation Network (PSBA) enables many public service organisations in Wales to do this. 4,000 public sites across Wales and over 80 public service organisations are connected on the PSBA network providing the foundations for much closer public service integration. These include health, fire and rescue, police, universities and local authorities. All schools in Wales are being upgraded on the PSBA to higher bandwidth to improve learning opportunities and all 650 GP surgeries are now PSBA-connected.

PSBA has a key role in enabling Wales to become one of the world's most connected digital nations. In October 2014 a new PSBA contract was awarded

to British Telecommunications Plc (BT). The new contract will continue to drive cost savings and enable collaborations across public service organisations. PSBA also provides a platform for ICT innovation such as shared data centre, cloud computing, video conferencing and application sharing, supporting delivery of a more efficient service to the Welsh public.

(iv) Make more effective and efficient use of technology across the Welsh public sector

Welsh Government recognises that efficiency benefits can better be realised by exploiting the use of digital technology. It has made significant investment in the infrastructure, its challenge now is to rapidly exploit this investment and take a strategic and co-ordinated approach across all public services to better deliver for the people who rely on these services.

It has started to explore this challenge by working with the public sector on developing an overarching strategy for digitally transforming public services across Wales.

When considering how the public sector has been making more effective use of technology there have been successes, such as:-

- High Performance Computing (HPC) Wales offers business and academia access to advanced computing technology and highly trained staff to help them use and exploit it effectively. The number of user accounts on the system has trebled in the last year from 581 in March 2013 to 1,872 in April 2014.
- Schools, teachers and pupils will soon be able to access the digital archive being amassed by the National Library Wales (NLW). Schools and teachers will access it

through Hwb and pupils directly online.

- The National Monuments Records of Wales (NMRW) development of an e-commerce facility for customers to purchase images and licenses directly online.

Digital Infrastructure

A first class digital infrastructure

Our objectives

The delivery of a Digital Wales has been underpinned by a commitment to ensure that Wales has a globally competitive, flexible and forward looking digital infrastructure through three principle objectives:

- (i) basic broadband to be available to all
- (ii) next generation broadband (minimum of 30Mbps) for all households and businesses
- (iii) improve mobile coverage across Wales

How are we doing?

(i) Basic broadband to be available to all

All premises in Wales are connected to a broadband enabled telephone exchange. Internet access is increasing (see Figure 5) and internet access via mobile devices has increased by 5% to 52%^{xi}. Our challenge is therefore less about availability but more one of quality or speed of the broadband service available.

Welsh Government has committed to ensuring that every premise in Wales can access a basic broadband speed of at least 2Mbps. To kick-start this commitment it launched the Broadband Support Scheme which provided a grant of up to £1,000 to those that fell below this threshold. Before it closed in September 2013, it received over 7200 grant applications and uplifted the speed of broadband for these to an average of 10Mbps.

Building on the success of the Broadband Support Scheme, the Welsh Government has launched Access Broadband Cymru which will run until end of March 2016. Like the previous scheme it supports enterprises, residents, third sector organisations and communities, which cannot achieve broadband speeds of greater than 2Mbps. 245 successful broadband installations have been made amounting to £225,318.00 in grant funding.

(ii) Next generation broadband (minimum of 30Mbps) for all households and businesses

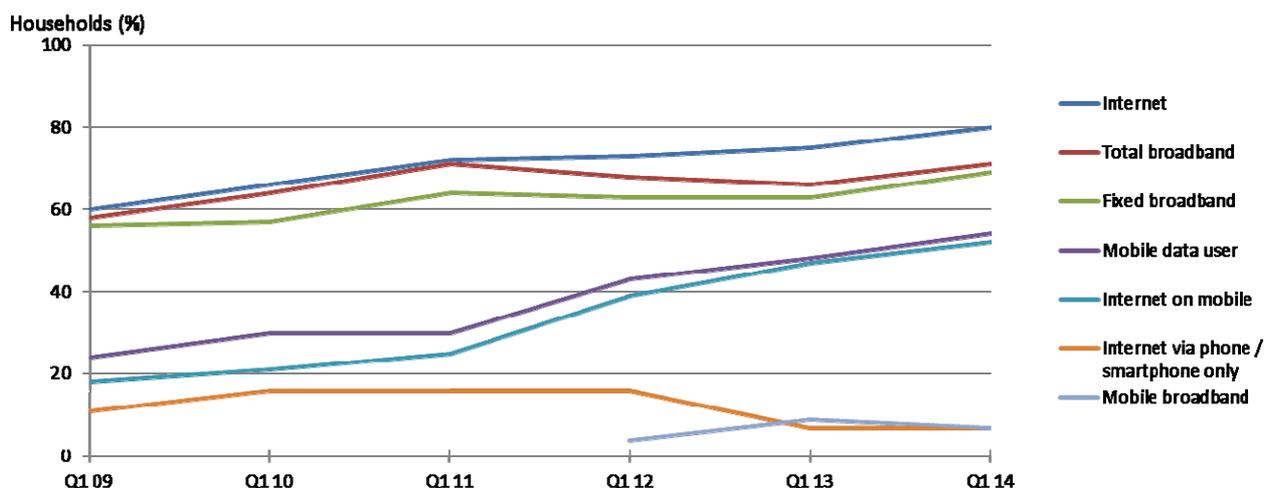
The Welsh Government 'Programme for Government' committed to creating a superfast broadband network in areas of Wales that had suffered market failure in the provision of fibre broadband, delivering a minimum of 30Mbps. The resulting Superfast Cymru programme is the largest partnership of its kind in the UK, working to give, when combined with commercial roll-outs, 96% of premises in Wales access to fast fibre broadband by 2016.

Superfast Cymru project has so far reached in excess of 278,000 premises and is on target to enable superfast broadband access to 96% of premises by 2016.

The roll-out has created over 250 new skilled jobs, over 110 new apprenticeships, is providing work experience opportunities for 900 people and protects over 300 existing jobs in Wales.

Ofcom reported that by June 2014 55% of premises in Wales were able to receive fibre broadband services over BT Openreach's Networks^{xii}.

Figure 5 Internet take-up in Wales: 2009-2014



Source: Ofcom Communications Market Report – August 2014

Although this proportion was the second lowest among the UK nations, it represented an increase of more than 10% compared to the previous year.

The UK Government's Department for Culture, Media & Sport awarded Cardiff and Newport £10.2m and £4m respectively to invest in ultrafast broadband. The scheme provides up to 1Gbit/s broadband connections for businesses, free wireless hotspots in high-footfall areas, and improved 4G mobile coverage, as well as equipping Cardiff buses and public buildings with free Wi-fi. The UK Government will also, through the Super-Connected Cities scheme, fund a one-off connection fee of between £200 and £3,000 to eligible businesses to cover the costs of installing faster broadband.

(iii) Improve mobile coverage across Wales

3G mobile coverage in Wales has rapidly increased and at 98.3%^{xiii} is now very close to the overall UK position.

However, more mobile users in Wales reported problems than the UK average with six in ten respondents in Wales having experienced at least one problem. Of these 47% of Welsh consumers stated

that 'no signal' is the problem they experience most (42% in 2013), followed by 59% being unable to use the mobile internet (22% in 2013) and 16% complaining of text messages arriving late or not at all (16% in 2013)^{xiv}.

To help address these issues the UK Government's £150 million Mobile Infrastructure Project (MIP)^{xv} aims to improve mobile coverage and the quality of coverage across the UK by 2015. The MIP also aims to secure mobile voice services for up to 60,000 or so premises that currently do not receive any mobile service from any operator.

Following the Ofcom 4G spectrum auctions, which was awarded to Telefónica O2 in 2013, a licence was supplied, which carries a 4G coverage obligation of at least 95% of the population in Wales by the end of 2017.

In addition to addressing the three principle objectives contained in Digital Wales, work is ongoing to deliver other infrastructure improvements, the first of these to come to fruition in October 2014, being the creation of a Cardiff Internet Exchange. The Welsh Government has worked with LINX (the London INternet eXchange), Cardiff County Council and other partners to create an internet

exchange that enables internet service providers to exchange internet traffic between their networks.

Historically all internet traffic in Wales had to be sent via London which is costly for local internet service providers and content providers who have the burden of paying for connectivity to London. Creating an internet exchange in Cardiff helps give the city and the whole of Wales a competitive advantage over other regions.

References

- i [Digital Agenda for Europe \(May 2010\)](#)
- ii [National Survey Wales 2014](#)
- iii [Digital Inclusion Plan 2014 - Welsh Government](#)
- iv [Global information technology report 2012](#)
- v [Schools in Wales: Examination performance](#)
- vi [e-Skills UK Technology Insights 2012](#)
- vii [e-Skills UK Technology Insights 2012](#)
- viii [Welsh Government Priority Sector Stats Bulletin - September 2014](#)
- ix [Welsh Government Priority Sector Stats Bulletin - September 2014](#)
- x [Ofcom Communications Market Report: Wales 2014](#)
- xi [Ofcom Communications Market Report: Wales 2014](#)
- xii [Ofcom Communications Market Report: Wales 2014](#)
- xiii [Ofcom Communications Market Report: Wales 2014](#)
- xiv [Ofcom Communications Market Report: Wales 2014](#)
- xv [www.culture.gov.uk](#)

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