



Cardiff Business School
Ysgol Busnes Caerdydd

Superfast Broadband
Business Exploitation Project

The Digital Maturity Survey for Wales 2017 – Summary

WELSH ECONOMY RESEARCH UNIT
Yr Uned Ymchwil i Economi Cymru



UNDEB EIMWROPEAIDD
EUROPEAN UNION



Llywodraeth Cymru
Welsh Government

**Cronfa Datblygu
Rhanbarthol Ewrop
European Regional
Development Fund**

Improving the performance of our Welsh SMEs is a key means of strengthening regional economic prospects.

The ability of SMEs to capitalise on the opportunities leveraged by superfast broadband is vital to their performance improvement.

“ Our *Digital Maturity Survey for Wales 2017* shows evidence of how Welsh SMEs adopt and use digital technologies enabled by broadband. The *Survey* shows not just how our SMEs use the broadband resource, but also how exploitation of enabled technologies works to improve business performance, with positive impacts for the whole Welsh economy. ”

Survey findings

The *Survey* is structured around a framework of understanding SMEs' ICT **resources** (their infrastructure, investment and capabilities), ICT **use**, and then links to **business performance** – with broadband access a key enabler of performance improvements.

The 2017 *Survey* highlights encouraging trends. For example, 42% of surveyed SMEs had adopted superfast (up 7 percentage points on the 2016 *Survey*). Just 3% of surveyed firms had no broadband in 2017 (see *Figure 1*). Clearly, there is still scope to improve the adoption of superfast broadband by the business community in Wales, but the strong trend in adoption in this short period is a welcome finding.

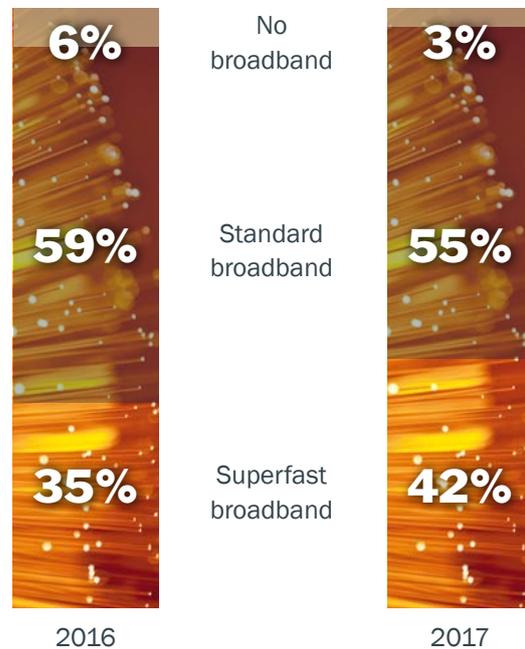


Figure 1. SME adoption of broadband in Wales

Adoption is only a first step. Performance improvements depend on how our SMEs use the resource. In the 2017 *Survey*, SMEs report using broadband to support cloud applications such as email, file sharing and storage, office software, VoIP and video conferencing (see *Figure 2* on following page).

More extensive use of cloud applications is linked to other positive trends, with 71% of surveyed SMEs reporting that over half of their employees had intermediate or above average IT skills, and with around half reporting that they employed ICT specialists in terms of development and support for web solutions, and maintenance of ICT infrastructure.

42%

of surveyed SMEs had adopted superfast broadband

71%

of surveyed SMEs said over half of their employees had intermediate or above average IT skills

Figure 2. Proportion of businesses using cloud computing services, by category



2/3rds

of SMEs had sold online in the last financial year

9 out of 10

surveyed businesses regularly made online purchases

SMEs are increasingly engaging in the digital economy through e-commerce transactions. This is one means of reducing business costs, but also of accessing new markets for goods and services at home and abroad. Two thirds of SMEs had sold online in the last financial year, with nine out of ten businesses regularly making online purchases.

Analysis of our Survey findings shows that four clusters of Welsh SMEs can be identified in terms of their digital maturity: Digitally Embedded, Active Exploiters, Passive Exploiters and Digitally Disengaged (see Figure 3, right).

For SMEs in Wales there are important lessons. Higher digital maturity is associated with better business performance in terms of turnover, profitability, employment, and innovation activity (i.e. introduction of new products, processes or services.). Among those SMEs that reported growth in their business performance, the increases in performance were likely to be larger among more digitally mature clusters. On average, more digitally mature SMEs reported increases in business performance of 50% or more, while more SMEs in less digitally mature clusters experienced slow to medium growth. Critically, differences identified between Digitally Embedded as opposed to Digitally Disengaged SMEs signal a need for the latter to connect with available Welsh Government and other support to assist them in better using the opportunities levered by superfast broadband.

Figure 3. Digital maturity clusters in Wales

Digitally Embedded

Adopters of superfast broadband with a very high proportion of employees with above average ICT skills; using a high number of digital applications, and secure the majority of their sales from online transactions.

Active Exploiters

Businesses likely to have adopted superfast broadband, having a high proportion of staff with above average ICT skills, and using a wider range of digital platforms and technologies. Nearly half of businesses in this cluster report online channels as the primary source of their sales.

Passive Exploiters

Businesses tending to have adopted standard broadband; more likely to have staff with above average ICT skills. They make use of basic cloud-based applications, but their use of online platforms to generate e-sales is generally low.

Digitally Disengaged

Businesses tending to be standard broadband users, with a high proportion of employees with below average ICT skills. The majority of such businesses do not use digital technologies and report no sales from online transactions.

Our 2017 Survey shows connections between superfast adoption and performance growth.



“ Poor performance in parts of the Welsh economy is one of the causes of the regional prosperity gap with the UK – it is then critical that our SMEs engage with the opportunities offered by adoption of superfast broadband. ”

The efficient use of the infrastructure is a means for Welsh SMEs to compete effectively, overcome the liability of distance from markets, to improve national and international trade prospects and to grow. The uncertainty caused by the Brexit process exemplifies the needs for SMEs to engage fully with the opportunities resulting from superfast broadband.

The team at Cardiff University is undertaking further analysis of the 2017 *Digital Maturity Survey* to reveal more details of how successful adoption translates into business effects.

Further detailed findings from the Digital Maturity Survey for Wales 2017 can be found in the main report, available at: <http://www.cardiff.ac.uk/superfast-broadband-project/digital-maturity-survey>



@CUWERU

*This report was written by
Dylan Henderson, Calvin Jones,
Max Munday, Laura Norris,
Laura Reynolds, Annette Roberts,
Neil Roche and Anna Scedrova.*

Telephone: 029 2087 6928

Email: hendersond3@cardiff.ac.uk

Twitter: @CUWERU

This booklet is available in Welsh.

The annual *Survey* is an integral part of the Superfast Broadband Business Exploitation (SFBE) programme, part-funded by the European Regional Development Fund (ERDF) through the Welsh Government. This provides assistance to SMEs to understand, adopt and make use of online digital technologies. The main report presents the results of the 2017 *Survey* of 453 SMEs in Wales.

May 2018