



Small Business Digital Exclusion

Research Report

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1. Introduction

1.1 Background

[Cwmpas](#) delivers [Digital Communities Wales](#): Digital Confidence, Health and Well-being programme (DCW) which is funded by the Welsh Government. DCW exists to reduce digital exclusion in Wales. It aims to create a Wales where everyone has the skills, access, and motivation to be a confident user of digital technology.

DCW's delivery focusses on reaching anyone who is not online by working with organisations that directly support them. It works with Third and Public Sector bodies and Private Sector organisations, including health and social care providers, demonstrating best practice on how to engage people with technologies and help support their basic digital skills development. DCW provides consultancy support to embed digital inclusion operationally and strategically, in addition to device loans, digital skills audits and digital skills training for public facing staff/volunteers.



Currently, DCW does not have a specific offer for Welsh, private sector SMEs. In order to design an effective offer, Cwmpas commissioned [Research Works Limited](#) to conduct qualitative research to identify small businesses' understanding of digital inclusion in Wales and to understand what the impact of digital exclusion is for SMEs.

1.2 Research objectives

The research was required to:

- Describe the nature of the private, small business sector in Wales
- Describe current understanding of digital inclusion within this sector
- Identify the digital exclusion and digital skills barriers facing private small businesses
- Highlight the impact of digital exclusion and a lack of digital skills on private small businesses, their staff and customers
- Provide recommendations and actionable insights to improve understanding of the impact of digital exclusion on this sector, and what support private small businesses need in future

2. Method and Sample

2.1 Research approach

The approach comprised desk research and qualitative research. These approaches were chosen in order to achieve the depth and detail of data required to address the research objectives.

2.1.1 Desk research

The desk research focussed on identifying the characteristics of the small business private sector in Wales, particularly in terms of business size, industry sector and locations; and on establishing whether any evidence about digital inclusion within the small business private sector in Wales already exists.

An initial online search was conducted using agreed search terms. This identified 23 possible sources which were then reviewed against the below exclusion and inclusion criteria.

- Studies focussed on one or more of the following topics:
 - The makeup of the private small business sector in Wales; business size, industry sector, locations
 - The digital capability of the small business private sector
 - Barriers to developing digital skills amongst small businesses, their staff, and customers
 - The impact of digital exclusion on small businesses
 - The impact of covid on digital capability in the small business private sector
- Geographic focus: Wales or the UK
- Date of research/publication: include only studies published after 2015

- Research methods: both primary and secondary research, as well as studies using diverse methods, including qualitative, quantitative, and mixed methods. Both academic and grey literature was included

This process identified 17 relevant sources which were reviewed, in full and are listed in Appendix A. The evidence was summarised in a desk research report which contextualised digital exclusion and a lack of digital skills within the small business sector in Wales. These findings informed the qualitative topic guides for the stakeholder depth interviews.

2.1.2 Qualitative research

Qualitative depth interviews (1 hour duration) were conducted with the owners/managers of small businesses as well as membership organisations supporting small businesses and IT providers working with small business clients. All participants opted to be interviewed via Zoom, for their own convenience. Owners/managers of small businesses were very time poor, and some elected to be interviewed in the evening or at weekends.

All interviews with the owners/managers of small businesses and IT providers working with small business clients were 'free found' by Welsh [Market Research Society](#) trained recruiters. Recruiters used an agreed recruitment questionnaire to screen potential participants' eligibility to take part, then invited them to an interview. Representatives from membership organisations working with small businesses were invited to participate by Cwmpas.

2.2 Qualitative sample

2.2.1 Overall sample

The total sample comprise 23 depth interviews, including:

- 17 interviews with small business owners/managers – 16 individual depth interviews and 1 paired depth interview (i.e. with 2 participants)
- 3 interviews with IT providers working with small business clients
- 2 interviews with membership organisations
- 1 interview with digital skills provider working with small business clients

Interviews were conducted by Research Works Limited between 18th January and 27th February 2023.

2.2.2 Small business owners/managers sample

The 17 interviews with small business owners/managers represented businesses that had been trading for differing lengths of time: from 1 to 130 years. The sample included a mix of small businesses in terms of:

- **Business size:**
 - 4 interviews with businesses with 1 – 4 employees
 - 2 interviews with businesses with 5 – 10 employees
 - 9 interviews with businesses with 10+ employees
- **Business location:**
 - 4 interviews with businesses in South East Wales
 - 2 interviews with businesses in South West Wales
 - 7 interviews with businesses in Mid Wales
 - 2 interviews with businesses in North Wales
- **Business environment:**
 - 4 interviews with businesses based in urban locations
 - 4 interviews with businesses based in suburban locations
 - 9 interviews with businesses based in rural locations
- **Business sector:**
 - 2 interviews with businesses in the construction sector
 - 2 interviews with businesses in the agriculture sector
 - 2 interviews with businesses in the retail sector
 - 4 interviews in the accommodation and food sector
 - 2 interviews in the production sector
 - 5 interviews in other sectors including motor trade, transport and storage, administrative and support, property and other service activities

The majority of interviews (15 out of 17) were with businesses assessed as having ‘low digital capability’; 2 were with businesses assessed as having ‘higher digital capability’. These two groups were included for comparison purposes.

Businesses’ level of digital capability was assessed against the measures used in the Lloyds UK Business Digital Index which comprised:

- Business does not have its own website
- Business does not use email to communicate with customers and suppliers
- Business does not use social media to communicate with customers and suppliers
- Business does not use online government services e.g. tax returns
- Business does not use business online internet banking
- Business does not use online business accounting software

Business owners/managers who agreed with 3 or more of the statements above were defined as having ‘low digital capability’. In addition, this group stated that they had no plans to invest or significantly improve digital in the near future. This additional measure was designed to reflect the finding from the Lloyds UK Business Digital Index that over half within the ‘low digital capability’ group had no intention to prioritize digital development. Owners/managers who disagreed with all of the statements were defined as having ‘higher digital capability’¹.

The 18 participants included a mix of gender and a range of ages (from 26 – 69 years old).



¹ Lloyds Bank UK business digital index, February 2022. <https://www.lloydsbank.com/business/resource-centre/businessdigitalindex.html>

3. Management Summary

3.1 Nature of the small business private sector in Wales

The small private business sector in Wales is estimated to comprise around 217,200 businesses, of which the vast majority (around 96%) are micro². The level of engagement with digital technology tended to increase with businesses size, with micro businesses the least engaged overall. Any future support offer will need to consider whether, and if so how, to reach micro and small businesses from a wide range of industry sectors with varying needs.



3.2 Understanding of digital inclusion within the sector

Small private sector businesses' current level of engagement with digital technology had been largely defined by need (i.e. trading survival during the pandemic), as well as appetite for growth:

Those with the lowest level of engagement with digital technology had not been forced to operate online during the pandemic, due to the nature of their business. Those who, in addition, had no appetite for growth did not feel that they had any need to explore digital technology. This group tended to use email, create content for Facebook, use online banking, order some supplies online. A few had cloud-based storage and backup, but none engaged with cybersecurity

Those with higher levels of engagement with digital technology had either:

- Been forced to operate more online during the pandemic. This group were more likely to have websites, to have a social media presence, to use online accounting and use cloud-based storage. There was better appreciation of cybersecurity amongst this group and some awareness that data could be used to support decision-making
- Or had explored digital technology pre-pandemic to help keep up with competitors and/or gain a competitive advantage. This group's engagement with digital technology had been prompted by the introduction of industry specific management systems which had created roles for IT staff who looked after data security, data management and analysis

² BEIS National statistics. Business population estimates for the UK and regions 2022: statistical release. This reports on private sector businesses, excludes the government and not-for-profit sectors and estimates numbers of private sector businesses by combining estimated numbers of unregistered businesses with data on registered businesses derived from a comprehensive business register (the ONS Inter Departmental Business Register)

3.3 Digital exclusion and digital skills barriers facing small businesses

Cost and time were identified as the biggest barriers to increasing digital capability for small private sector businesses. Although often quoted barriers, others emerged that may be equally influential.

- A lack of awareness and understanding of the benefits that digital technology could bring was amongst the largest barriers. As a result, there was a fear of wasting money on inappropriate products and services
- Small business owners/managers often lacked confidence to find out about the benefits that digital technology could bring and, as a result, often made decisions about specific digital solutions based on assumptions
- These assumptions created another barrier: fears about the consequences of change. Sometimes these were fears about disruption to business continuity; at other times these were fears about coping with potentially increased demand
- Accessible digital solutions engaged owners/managers keen to build their own skills. For this reason, communicating skills (e.g. Facebook, Google Maps) had often been developed in house. Access to the other essential skills (i.e. creating, transacting, cybersecurity, managing information and solving problems) was perceived to require the support of external providers, which created a cost barrier
- Although accessible digital solutions enabled many owner/managers to engage with digital technology, build their own skills and retain a sense of control over their business without incurring costs, stakeholders pointed out that the owners/managers of the smallest micro businesses faced basic IT skills barriers that would prevent them from using even the most accessible digital solutions

3.4 The impact of digital exclusion and a lack of digital skills on small businesses

The perceived impact of digital exclusion and a lack of digital skills differed between those who were more and less engaged with digital technology. Those with the lowest level of engagement with digital technology worried about the potential negative impact of engaging with it (rather than the potential negative impact of not engaging with it). Those with higher levels of engagement with digital technology worried that their businesses would suffer if they did not keep up-to-date and seize any opportunities that digital technology presented.

3.5 What support is needed from the sector?

Those with the lowest level of engagement were not aware of how digital technology could support their business and were not particularly interested in finding out. Firstly, this group need support to engage with digital technology (via prompts from influencers such as accountants, peers, suppliers and tech providers).

Communications encouraging this audience to engage with help and support will need to convey the tangible benefits of digital solutions that solve small business needs. These benefits will need to be conveyed by credible messengers i.e. other people owning/managing small private sector businesses.

Those with a higher level of engagement were aware that they were probably missing out on digital solutions that would support their business and were interested in finding out more. In future, this group wanted news about which digital technology to engage with brought to them with clear identification of the benefits to their business, based on an understanding of their specific business' needs.

Ideally, those with a higher level of engagement also wanted support to explore digital technology in time and cost-efficient ways. This was a flexible solution for those concerned about committing time and money to 'training' or hiring expert sub-contractors.

By contrast, the owners/managers of the smallest and least engaged micro businesses will need support to develop basic digital skills to enable them to benefit from even the most accessible digital solutions.



4. Main Findings

The findings are reported by addressing each research objective in turn (as listed in section 1.2), supported by evidence from both the desk research and qualitative research.

4.1 Nature of the small business private sector in Wales

This section provides a summary of findings from the desk research report, which can be found in full in Appendix B.

4.1.1 The characteristics of the small business sector in Wales

The small business sector comprises 2 distinct groups: 'small' sized businesses with 10-49 employees and 'micro' sized businesses with 0-9 employees. In both Wales and England, the 'micro' sized group is by far the largest, comprising 83.7% of businesses in Wales and 85% of businesses in England³. The 'small' sized group is of a similar size in Wales and England; 13.3% of businesses in Wales and 12.1% of businesses in England.

The number of private sector 'micro' and 'small' businesses in Wales has been estimated. Once again, the 'micro' sized group is substantially larger than the 'small' group: statistical evidence suggests that 208,700 are micro and 8,500 are small⁴. These figures reflect the overall audience size for any future digital skills intervention, although the level and type of digital exclusion and digital skills needs amongst this audience varies considerably.



As discussed in section 4.2, micro businesses tended to be less engaged with digital technology than small businesses.

The profile of the small and micro sized business groups differ in terms of industry sector. The industry groups with the largest proportion of small businesses in Wales are: health, accommodation and food, wholesale production and education⁵. By contrast, micro sized businesses dominate two of the largest industry groups in Wales: agriculture and construction⁶. Any future support offer will therefore need to consider whether, and if so, how to identify and reach both micro and small businesses from across a range of industry sectors with varying needs.

³ BEIS Longitudinal Small Business Survey: SME Employers – UK, 2021.

[Small Business Survey 2021: businesses with employees - GOV.UK \(www.gov.uk\)](https://www.gov.uk/small-business-survey-2021-businesses-with-employees)

⁴ BEIS National statistics. Business population estimates for the UK and regions 2022: statistical release. This reports on private sector businesses, excludes the government and not-for-profit sectors and estimates numbers of private sector businesses by combining estimated numbers of unregistered businesses with data on registered businesses derived from a comprehensive business register (the ONS Inter Departmental Business Register)

⁵ UK business, activity, size and location; 2022. Source: Office for National Statistics.

⁶ BEIS Longitudinal Small Business Survey: SME Employers – UK, 2021.

[Small Business Survey 2021: businesses with employees - GOV.UK \(www.gov.uk\)](https://www.gov.uk/small-business-survey-2021-businesses-with-employees)

Existing evidence suggests that small and micro sized business employers in Wales are comparatively optimistic in outlook. For example, SME employers in Wales (33%) were more confident that employment numbers would increase compared to those in England (30%). In addition, 49% of Welsh SME employers expected turnover to grow, compared with 45% of SME employers in England⁷. This optimism was reflected in the qualitative interviews, where most participants needed little prompting to reveal and discuss their future aspirations for their businesses. However, the part small private business owners/managers envisaged that digital could play in achieving these future aspirations varied, as described below and in more detail in section 4.2.

4.1.2 Digital capability of small businesses in Wales

The Lloyds UK Business Digital Index provides a rich source of information on the level of digitisation of SME businesses in the UK. Its limitations are that it reports findings based on small and medium sized businesses, referred to as 'SMEs', as well as on the basis of all SMEs (as opposed to private sector SMEs)⁸.

In Wales, the proportion of businesses with high digital capability has increased from 45% in 2014, to 65% in 2019 and 79% in 2021. However, in 2021, 21% of businesses in Wales were in the low digital capability segment, and, within this segment, 56% stated they had no intention to prioritise digital development. A majority of the qualitative sample was from this, the most 'digitally excluded' group, as explained in section 2.2.2. Pen portraits of businesses from this group can be found in section 4.2.1 and 4.2.2.

The Lloyds UK Business Digital Index also describes 6 'essential digital skills' and highlights the proportion of businesses which state they can undertake each of them. The proportion of businesses in Wales which state they can communicate digitally, create digitally, problem solve and transact online is in-line with the different regions in England. However, a lower proportion felt they had skill in cybersecurity compared to many other regions in England. A lack of awareness and understanding of cybersecurity was reflected in the qualitative interviews suggesting that this is a particular area of digital skills need.

Sections 4.2.1 and 4.2.2 describes the extent to which small private businesses owners/manager from the 'most digitally excluded group' use these skills, as well as the impact they have on their businesses.

⁷ BEIS Longitudinal Small Business Survey: SME Employers – UK, 2021. [Small Business Survey 2021: businesses with employees - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/98482/small-business-survey-2021-businesses-with-employees.pdf)

⁸ Lloyds Bank UK business digital index, February 2022. <https://www.lloydsbank.com/business/resource-centre/businessdigitalindex.html>

4.1.3 Small businesses' role in Welsh communities

The qualitative data reveals the range of ways in which small businesses support communities; not only in terms of providing services and employment opportunities, but also in terms of social capital:

“

I would always put regulars over new customers. Some people in the community rely on the salon, for conversation and interaction, and sometimes we're the only people they speak to in their week. They share their troubles, and that's important to us. The community is very important, but of course we're open to new clients and expanding. But I would never sacrifice regulars and the community out of greed.

(Micro, other service activities, higher level of engagement)

”



“

A lot of the younger staff have grown up working in the hotel since they were 14/15. They start in the kitchen washing up, then progress to waiting, they get to know exactly how everything works and where it goes, it's a community.

(Small, accommodation, highest level of engagement)

”

“

If I need to go digital to offer coffee mornings or support groups, that's bringing people together, that's what's important, not growing my business for profits.

(Micro, food service, higher level of engagement)

”

For a small number, the desire to support the local community was a barrier to engaging with digital technology:



How would our older clientele work with that [web payments]? Are they going to be comfortable in going onto a website and putting in their card details? You've got to tailor your business for everybody.

(Small, construction, lowest level of engagement)



4.2 Understanding of digital inclusion within the sector

The level and type of digital exclusion and digital skills needs amongst the small, private sector business audience varied considerably. A spectrum emerged:

- From those with extremely limited engagement (or interest) in digital technology, described in 4.2.1 and labelled 'those with the lowest engagement with digital technology';
- To those with more engagement with digital technology and interest in finding out more, described in 4.2.2 and labelled 'those with a higher level of engagement with digital technology';

- To those routinely working with digital products and services, labelled 'those with the highest level of engagement with digital technology'

The terms 'lowest', 'higher' and 'highest' are used in relation to other businesses in the sample (i.e. not any external, independent measure of engagement with digital technology).

The first two groups comprise businesses recruited as having 'low digital capability' and the third group comprises businesses recruited as having 'higher digital capability', as explained in section 2.2.2.

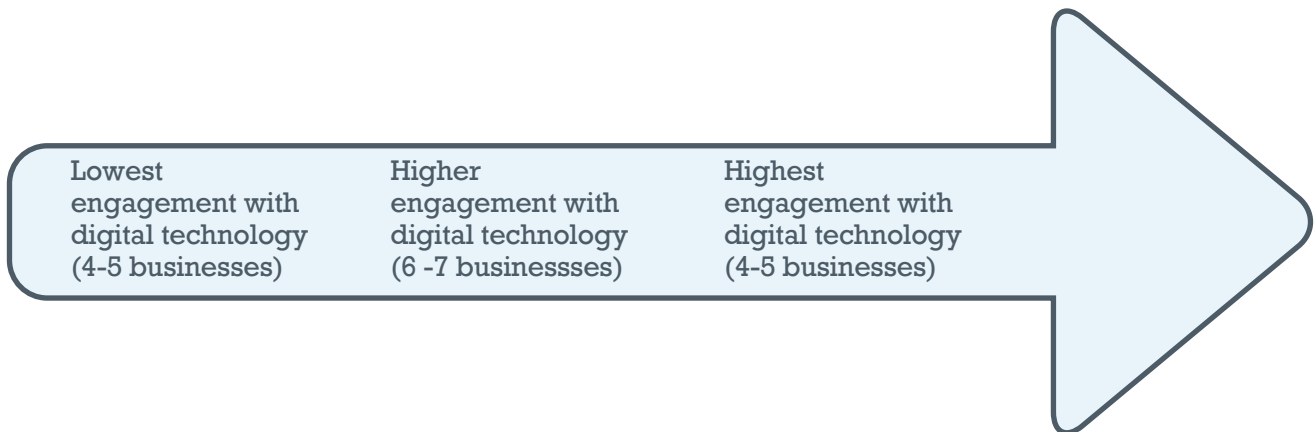


Figure 1: sample divided into segments based on a qualitative assessment of their level of engagement with digital technology.

These groups reflect this sample of businesses at a particular moment in time; it does not reflect a pathway. Any movement between groups would be influenced by need and/or appetite for growth (as described below), or another external driver.

4.2.1 Factors influencing level of engagement with digital technology

Overall, businesses' level of engagement with digital technology was largely defined by need (i.e. trading survival), as well as appetite for growth.

Those with lowest engagement with digital technology had not been forced to operate online during the pandemic, due to the nature of their business. As a result, this group were less engaged with digital technology than those who had:

“

When we were all working from home, everyone had to get to use Teams and Zoom, and that really helped to bring people along. People were initially a bit sceptical but I think it brought everyone into the online world.

(Small, manufacturing, highest level of engagement)

”

“

We're paperless. All documents are stored in OneDrive. Before Covid we printed everything, but since then, everything's gone digital. The switchover was plain sailing.

(Small, real estate activities, higher level of engagement)

”

Businesses' appetite for growth also influenced their level of engagement with digital technology. Those motivated to grow (e.g. recent start ups) were more willing to consider how digital technology could support their business goals. Those with the highest engagement with digital technology were competing with other businesses offering the same type of goods and services within their locality. They had explored digital technology to help them keep up with competitors and/or gain a competitive advantage.

These benefits were of less interest to those with less motivation to grow, who were more likely to focus on how the digital technology might disrupt trading in negative ways:

“

I don't want to advertise and get bombarded and have to turn people away.

(Micro, other service activities, lowest level of engagement)

”



4.2.2 Lowest engagement with digital technology

The businesses in this group included most micro businesses in the sample, as well as some small businesses. This group were not aware of how digital technology could support their business and were not particularly interested in finding out.

This group provided the least evidence of 5 of the 'essential digital skills' described in the [Lloyds UK Business Digital Index](#), as described below:



Communicating

Using email to communicate with customers and suppliers.



Creating

Limited number of customer contacts generated by Facebook page content.



Transacting

Online banking, ordering some supplies online but not necessarily regularly.



Cybersecurity

Haphazard approach to keeping software up-to-date and password security reflects minimal engagement with cybersecurity.



Managing information

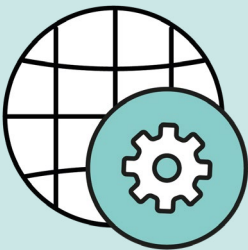
For some, use of cloud-based storage.

“

What if the laptop breaks and I've got absolutely nothing? What if we have a power cut and they can't fix it for a couple of days? Everything just stands still. That's why I like my pen and paper. You don't get technical issues. I know we have to move forward, but I think solely relying on technology is a no-go for me. I need to have my backup.

”

- Family run roofing business, 4 employees, trading since 2020, reliant on one laptop, plus pen and paper
- New customers via through word-of-mouth or through a Facebook business page
- Communication with customers by phone, email or post
- Supplies ordered online or by phone from three local firms
- Paper diary, laptop for invoicing
- Online banking
- No cyber security



- ✘ Low appetite for growth
- ✘ Low confidence/skills
- ✘ Lack of understanding of benefits of digital tech

4.2.3 Higher engagement with digital technology

The businesses in this group included a mix of micro and small businesses from the sample. They were aware that they were probably missing out on digital solutions that would support their business and were interested in finding out more about them.

This group provided better evidence of 5 of the 'essential digital skills' described in the Lloyds UK Business Digital Index than the previous group, as described below:



Communicating

Using email to communicate with customers and suppliers. This group also tend to have websites, either used to prove business legitimacy or as a way of linking to third party sites (e.g. booking.com, or manufacturers). In addition, some evidence of using WhatsApp to communicate with groups of staff.



Creating

For some, greater use of social media (e.g. Instagram and Tik Tok as well as Facebook), particularly amongst the more creative businesses e.g. hair and beauty, food and drink.



Transacting

As well as using online banking, this group were routinely ordering supplies online, and there was also some evidence of online accounting practices e.g. auto-generated invoices, uploading receipts to accountancy apps.



Cybersecurity

Better appreciation of the importance of cybersecurity not always matched by practice. Some evidence of routine procedures e.g. antivirus scanning, back ups.



Managing information

Consistent use of cloud-based storage, and some using mobiles to do business on the move.



Problem solving

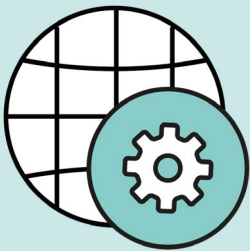
Some awareness that data is available from websites but little use of it.



Old systems cost time and money. They aren't using the tablets they bought for the restaurant to take orders because they haven't the time or the resources to train staff. Their accounts aren't integrated so senior staff can't access information that would assist the day to day running of the hotel.



- Rural hotel, 30 employees (numbers fluctuate seasonally), trading 'for centuries'!
- Online booking and payment system (but not integrated with accounting or banking systems)
- Facebook page for advertising offers, website out-of-date and does not support transactions
- Routine online ordering
- Some cyber security measures in place
- Collecting customer data but not using it



- ✘ Low of time
- ✘ Low of money to invest
- ✘ Fear that suggested digital solutions will not be fit for purpose

4.2.4 Highest engagement with digital technology

The businesses in this group were all small businesses from the sample. Industry specific management systems had provided the gateway to exploring more digital solutions.

This group demonstrated even better evidence of all of the 6 'essential digital skills' described in the Lloyds UK Business Digital Index than the previous group, particularly in terms of engagement with digital products (e.g. apps and management systems), as described below:



Communicating

Using email to communicate with customers and suppliers as well as messaging via websites, social media and management software.



Creating

Moving away from websites and towards greater use of social media e.g. Facebook, Instagram, Twitter.



Transacting

Online banking, routinely order supplies online as well as use of online accounting software (e.g. Sage, Xero).



Cybersecurity

More likely to have a person tasked to look after IT and therefore more evidence of routine security procedures. However, inconsistencies remain (e.g. lack of password policies).



Managing information

Using industry-specific management systems to manage customers, staff, workflow and accounts (e.g. invoicing) which can be accessed via mobile. Some use of software to collaborate (e.g. Trello).



Problem solving

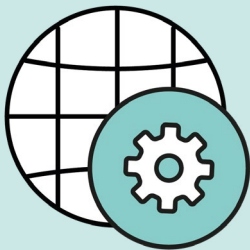
Use of data produced by management systems (e.g. cost tracking, managing stock) and generated by websites to analyse traffic.



At the moment we're finding out about digital tech mainly from networking, it would be nice if there was some kind of portal where you could go to find out what's new and what's happening. Half of the problem is discovering what's out there, because things become obsolete quickly.



- Food producer, trading for 15 years, employing 40 staff
- Actively seeks out digital solutions including: digital rota system, online accounting software and Trello
- Supported by in-house IT specialist who manages cyber security
- Driving customers to social media (Facebook and Instagram) because regarded as more 'fluid' than website



- ✓ Low appetite for growth
- ✓ Low confidence/skills
- ✓ Lack of understanding of benefits of digital tech

4.3 Digital exclusion and digital skills barriers facing small businesses

The desk research found evidence that the biggest barriers to increasing digital capability for small private sector businesses were a lack of time and funding. Indeed, cost and time were also the most frequently cited barriers to engaging with digital technology in the qualitative research.

A lack of time was a particular barrier for owners/managers of small private sector businesses responsible for day-to-day operations as well as medium and long-term business development:

“

They're so busy running a business, they don't have time to implement the marketing stuff we're telling them to do, let alone having to learn new skills at the same time as doing what they do as business owners, it's too much.

(Stakeholder)

”

“

We have talked about going entirely electronic, but it's just time. Where do you start with it? You need someone to tell you or show you what's the best way to do it.

(Small, retail, higher level of engagement)

”

Cost was a significant barrier for small private sector businesses, particularly in the current tough trading conditions created by the cost-of-living crisis:

“

We are so challenged monetary wise, every shift has the bare minimum staff, there are no spare resources.

(Small, accommodation, highest level of engagement)

”

“

Maybe they [small businesses] could access finance for kit, but again, some organisations perhaps don't want to, and it could put them in financial difficulty if they haven't got the cashflow for it.

(Stakeholder)

”

Whilst cost and time are undoubtedly major barriers, others emerged from the qualitative that may be just as influential. Below we discuss these additional, reported in terms of the three essential ingredients for digital inclusion: connectivity, confidence and skills⁹.

4.3.1 Barriers in terms of connection

In the main, connection barriers were felt to be a thing of the past:

“

In 2016, it was a lot about rural businesses not being able to get speeds beyond dial up. There has been a massive change with that since then, and we don't get inquiries for that sort of thing anymore. Now it's usually only to complain about their supplier, but they're usually able to access broadband, or we can put them on to alternative solutions like point-to point wireless.

(Stakeholder)

”

“

Connectivity used to be a huge problem, particularly between businesses who wanted to transfer things between two different sites. Your connectivity used to be unreliable which increased resistance to it, but that's not really an issue anymore, internet is so good now.

(IT provider)

”

However, connection issues clearly remained a challenge for a small number:

“

We work with people on slate quarries who are so far from the main site and offices and connection that we provide them with a dongle so they can get connectivity. It's a particular problem in West Wales and development sites where there's nothing for miles. If they're lucky they get a phone signal, which we can amplify and use.

(IT provider)

”

⁹ Welsh Government Digital Strategy for Wales (2021) – Mission 2: digital inclusion <https://www.gov.wales/digital-strategy-wales-html/#66659>

“

Being in the country, it goes down a lot, which is annoying. It doesn't go down for long, just a few minutes, but it's annoying when you're trying to do things. It happens once or twice a day. They keep saying they're going to sort it out but it never seems to get sorted out.

(Micro, accommodation, higher level of engagement)

”

“

We get on the internet but everything is very slow. On this site, we're right by a town and it's quick, but on the other sites we don't get great internet and mobile phone signal, so you have to go to somewhere where you can get signal. A lot of the time if we've got no internet on a certain site, we put all the data in and then when we move to a site where we do have it, it will update then. It's not great, but it works until we get better coverage in the rural areas.

(Small, agriculture, highest level of engagement)

”

“

For a number of businesses there's a bit of a lottery as to where you are which dictates the opportunities available to you to participate and exploit digital connectivity.

(Stakeholder)

”

4.3.2 Barriers in terms of confidence

Of all the many barriers to engaging with digital technology, a lack of awareness and understanding of the benefits that it could bring was amongst the largest:

“

People's ignorance is a big barrier, not knowing what they can do and how easy it can be.

(IT provider)

”

“

They don't know what they want when they come to us. We then look to see what they need, explain why they need it and why it's important.

(IT provider)

”

The barrier to gaining the knowledge required to make informed decisions about digital solutions was a lack of confidence: all too often owners/managers did not know who to ask about digital technology or where to look for help or how to have a conversation about these solutions in the context of their business.

Moreover, there was a fear of wasting money on inappropriate products and services due to a lack of knowledge, which was acknowledged by stakeholders and IT providers:

“

It's understanding the digital landscape as well, to avoid pitfalls, and to avoid signing up for things you don't really need.

(Stakeholder)

”

“

The worry is people being bamboozled by big flashy marketing companies promising the world and not knowing where to go for impartial and good advice.

(IT provider)

”

“

Yes, I don't want to learn a million things if I only need two out of that million things. I want someone to explain those two things I need to learn to run the company better, so I can make it run more efficiently.

(Small, other service activities, lowest level of engagement)

”

Since small business owners/managers often did not understand the difference digital solutions could make to their business, and were not confident to find out, they were often making decisions about specific digital solutions based on assumptions:

“

I just don't think we would use customer data.

(Micro, other service activities, higher level of engagement)

”

“

No, I don't think that [online quotes] would work for a roofing company because it all works on measurements and pitching and angles.

(Small, construction, lowest level of engagement)

”

A lack of awareness and understanding of the benefits that digital technology could bring also created another barrier; fears about the consequences of change:

“

If we went fully digital then there's a potential we would lose quite a lot of customers. I'm talking about the older generation now, they're not tech savvy at all.

(Small, construction, lowest level of engagement)

”

“

The last time they updated the software was a few years ago, I keep meaning to ask if there's another update. I'm worried the update might be so drastic it'll be very different from what we're used to.

(Micro, real estate activities, lowest level of engagement)

”

Sometimes these were fears about disruption to business continuity (as an IT provider reflected, “A lot of small businesses go by ‘if it isn’t broke, don’t fix it’”); at other times these were fears about potential growth (e.g. how will we cope with increased demand?).

““

We seem to be doing just fine as we are. I kind of adopt the motto that if it’s not broken, don’t fix it.

(Small, construction, lowest level of engagement)

””

4.3.3 Barriers in terms of skills

Small business owners typically based their businesses on personal skills e.g. chefs opening restaurants, farmers diversifying into different products. The level of control based on personal expertise that they exercised over their businesses, as well as a belief that they lacked the skills to implement digital technology was therefore more of a barrier for smaller business owners/managers compared to larger businesses more familiar with employing specialist contractors:

““

They fear it’s going to be too hard or they’ll mess it up.

(IT provider)

””

Owner/manager concerns about their personal lack of skills was particularly high in relation to cybersecurity, managing information and problem-solving tasks.

““

Maybe I’m more worried about going digital and needing help because of the legal side. Making sure I do everything correctly and safely.

(Micro, other service activities, higher level of engagement)

””

There was particularly low awareness and understanding of what was involved in these areas of digital technology and therefore most resistance to engaging with them:

““

I wouldn’t understand where to start with that to be honest.

(Small, repair of motor vehicles, highest level of engagement)

””

Accessible digital solutions engaged owners/managers keen to build their own skills (and retain control). Stakeholders described how owners/managers of small private sector businesses often ‘picked things up’ as they went along (to varying degrees of success).

For this reason, Facebook and Google Maps were popular way of connecting with customers for those amongst the least engaged with digital technology:

“

If I've got time and I can fiddle about with it, have a little look through, which is what I did with Facebook or with Indeed after my son set it up for me. Have a little poke about, I think I'd be good with that.

(Small, support service activities, lowest level of engagement)

”

Younger employees (as well as family members and friends) brought additional digital skills into the business e.g. skills gained from personal use of social media. Culturally, younger employees were more likely to have a 'digital by default' outlook.

As one stakeholder put it:

“

Moving with the times, sometimes it's via the younger generation of a business.

(Stakeholder)

”

“

This telecoms guy that joined the business, he's younger and has new ideas and wanted to get our messages and services out there on social media.

(IT provider)

”

By comparison, a lack of digital skills amongst the oldest members of the workforce was another barrier to engaging with digital technology:

“

My administrator is less confident than me. She's in her 60s and bit slower to learn with things like spreadsheets and emails.

(Micro, real estate activities, lowest level of engagement)

”

Of the 6 essential skills described in the Lloyds UK Business Digital Index (as discussed in section 4.1.2), small private businesses were most likely to identify and build 'communicating' skills in house, as described above. Similarly, some 'transacting' skills had also been developed in house e.g. Internet banking and online purchasing skills, largely due to necessity.

However, access to the other essential skills was perceived to require the support of external providers, which created a cost barrier.

Although accessible digital solutions enabled many owner/managers to engage with digital technology, build their own skills and retain control without incurring costs, stakeholders pointed out that the owners/managers of the smallest micro businesses faced basic IT skills barriers that would prevent them from using even the most accessible digital solutions.

There was not felt to be an offer for the group lacking basic IT skills:

“

For specific skills, like designing an app, you can get that. But for the basics and foundations, no, there's nothing practical for business owners.

(Stakeholder)

”



4.4 The impact of digital exclusion and a lack of digital skills on small businesses

The perceived impact of digital exclusion and a lack of digital skills differed between those who were more and less engaged with digital technology. Those with the lowest level of engagement with digital technology worried about the potential negative impact of engaging with it (rather than the potential negative impact of not engaging with it). Those with higher levels of engagement with digital technology worried that their businesses would suffer if they did not keep up-to-date and seize any opportunities that digital technology presented.

4.4.1 Small business owner/manager perceptions of the impact of not keeping up to date with digital technology

Those who were more engaged with digital technology worried that their businesses would suffer if they did not keep up to date:

“

I think we do need to go digital, there's going to come a point where what we do is going to stop us a bit.

(Small, retail, higher level of engagement)

”

“

Our hotel software is very basic and that's holding us back.

(Small, accommodation, higher level of engagement)

”

“

Change would be prompted by realising our system doesn't do enough for us anymore and that we need more from it. Realising your systems don't work anymore and you're doing it all in an old-fashioned way, finding yourself really far behind and not knowing how to catch up.

(Micro, real estate activities, lowest level of engagement)

”

All participants, regardless of their level of engagement with digital technology felt that small private sector businesses were potentially missing out on opportunities for improvement by not engaging with digital technology:

“

I've got a feeling that there is lots more we could do.

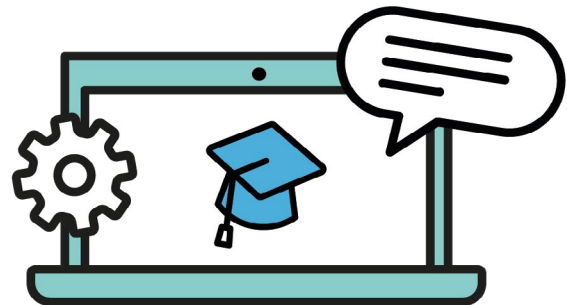
(Micro, real estate activities, lowest level of engagement)

”

The following were common improvements that many owners/managers wanted to realise:

- **Greater productivity:** “You don’t always know if you’re doing it in the most productive way.”
(Small, retail, higher level of engagement)
- **Knowledge sharing between members of staff, reducing reliance on individual team members:** “Currently, senior staff can’t access information that would assist the day to day running of the hotel.”
(Small, accommodation, highest level of engagement)
- **Increased security to safeguard business continuity:** “I got hacked just before Christmas. The amount of work I had to redo was unbelievable. The damage they did in a week took me three months to fix.”
(Small, real estate activities, higher level of engagement)
- **Better staff experience:** “Some form of digital group that feels more professional than WhatsApp, with a moderator, you could share documents and menu ideas or the best seasonal wines. That would be great. Or a way to communicate with staff when I’m not there. It would be good to give staff easy access to all their documents, where they can login and see all their payslips.”
(Micro, food service, higher level of engagement)
- **Time saving:** “If we didn’t have to rely on WhatsApp, it would make my life so much easier. I’d only have to work half a week.”
(Small, real estate activities, higher level of engagement)
- **Cost saving:** “Because we can’t take bookings on our website, we pay hefty fees to booking.com which decreases our profit margins.” (Small, accommodation, highest level of engagement)

Improvements – as above - were motivating reasons to engage with digital technology across the sample. By comparison, growth, particularly in terms of winning business and attracting customers, was not a consistently shared goal (as discussed in section 3.2.1).



4.4.2 Stakeholder perceptions of the impact of not keeping up to date with digital technology

Stakeholders felt that a lack of engagement with digital technology was likely to have a global impact on the current operation and future survival of small businesses:

“

It could be that they don't present a tender in a diagram format to look as funky as somebody else's. It could be your website, how you attract new customers; it could be not maximising your audience as you would be if you put it on social media. Everything comes back to technology these days. Everything has changed since March 2020.

(Stakeholder)

”

The perception that digital technology could bring wide-ranging benefits was in contrast with owner/manager perceptions, who were more likely to think about the specific benefits of different products or services e.g. the benefits of using social media, the benefits of using online accounting software.

Stakeholders also challenged a key owner/manager perception that engaging with digital technology would be time-consuming. Ultimately, digital ways of working were felt to save time:

“

The benefit is more time. To then focus on their product and their business and gaining more customers, rather than just running to stay still. They end up spending all their money to stay still. With any business you've got to keep learning, keep growing, keep moving.

(Stakeholder)

”

“

Digital is the means to an end. It's about better business practices that get you further.

(Stakeholder)

”

5. Conclusions

5.1 What support is needed from the sector?

The part owners/managers envisaged that digital could play in the future of their business varied:

- Those with the lowest level of engagement were not aware of how digital technology could support their business and were not particularly interested in finding out. Firstly, this group need prompts to engage with digital technology. Secondly, once engaged, this group need support to understand which digital technology to engage with, as well as support to develop their confidence and basic digital skills
- Those with a higher level of engagement were aware that they were probably missing out on digital solutions that would support their business and were interested in finding out. In future, this group support to understand which digital technology to engage with, as well as support to explore digital technology in time and cost-efficient ways



This section describes what small, private sector owners/managers wanted from these different types of support.

5.2 Prompts to engage with digital technology

There are a range of external people and organisations who could prompt those with the lowest level of engagement to consider digital solutions.

These include:

- **Intermediaries such as accountants:** “My accountant is joining another company and I’m wondering if it’s going to all change, so I am actually going to ask him if I should look at going digital and if he can suggest what I should use, what software would be best for me.” (Micro, other service activities, higher level of engagement)
- **Industry peers:** “We were at an award ceremony chatting to various other people in the catering industry, having a natter, and the owner said, ‘oh I’ve just been talking to this guy about this online accounting thing’. When he explained it to me, what it did, it sounded interesting.” (Small, manufacturing, highest level of engagement)
- **Tech providers:** “Yes, it [back up] is a cloud thing. We used somebody, again, who I found out about through a friend, when we had IT issues, and they set it up for us.” (Small, repair of motor vehicles, highest level of engagement)
- **Suppliers:** “One of our suppliers wants us to put something about them on our website every week.” (Small, retail, higher level of engagement)
- **Government mandates:** “Am I going to be forced to do everything digitally? Going back to your self-assessment and stuff.” (Small, construction, lowest level of engagement)

Communications encouraging this audience to engage with help and support will need to convey the tangible benefits of digital solutions that solve small business needs.

These benefits will need to be conveyed by credible messengers i.e. other people owning/managing small private sector businesses:

“

If they can identify with the person advising them, and how much difference can be made, people can connect. If it’s somebody in a suit with 50 employees telling you to sort your digital and cyber stuff out, it’s meaningless.

(Stakeholder)

”

5.3 Support to understand which digital technology to engage with

Those who with a higher level of engagement with digital technology wanted news about relevant digital solutions to be brought to them (rather than expecting them to seek it out for themselves):

“

It's only when people alert you to these things ... We need to be better at discovering things. At the moment we're doing it mainly from networking, it would be nice if there was some kind of portal where you could go to find out what's new and what's happening.

(Small, manufacturing, highest level of engagement)

”

“

I'm more than happy to learn, but where do you start? We are thinking of doing our inventory online, it's just getting the information really. I don't know what I'm looking for.

(Small, retail, higher level of engagement)

”

“

What we do today is how it's been done forever, so there must be ways to save time, save money, make things easier and ways of doing things we don't know about yet.

(Small, accommodation, highest level of engagement)

”

Those with a higher level of engagement wanted to understand the specific benefits that digital solutions would bring:

“

You don't know what's out there and how it can help you. Unless someone's told you, a lot of things do go past you. We're trying to be more up-to-date, so it would be good to be told, this would help in this way.

(Small, retail, higher level of engagement)

”

“

We'd have to set a business case for why we have to do it. It needs to be clear what what's in it for the business, the financial benefit to the hotel or the customer service.

(Small, accommodation, highest level of engagement)

”

Ideally, small private sector business owners/managers wanted help and support derived from an understanding of their specific business' needs, delivered with an understanding of operational constraints i.e. in terms of time, money and existing levels of confidence and skill:

“

You have to spend time talking to the business owner and getting to know how they run things. There's a lot more work involved in getting the right information from the business than you might think, in order to suggest effective improvement. It can also be time intensive for the business owner, but if they want to sustain and grow then it's time they have to invest.

(IT provider)

”

“

In my experience, most companies want decent advice; they want to know if they need to buy that new kit or system or not.

(IT provider)

”

“

We changed the tills last year because the old ones were on their way out. It was forced upon us. The guy that came out to fit the new ones got us really excited and it sounded amazing, but actually he didn't ask us enough questions or we didn't give him enough information and he set it to generic settings that didn't function for our needs. It wasn't producing the reports we needed. They didn't get to know us at all, they just wanted to get the system in and be done.

(Small, accommodation, highest level of engagement)

”

“

I've thought about asking someone to come and look at the business to see how it can be improved, someone to recommend what software I should be using and to update us.

(Micro, real estate activities, lowest level of engagement)

”

5.4 Support to explore digital technology in time and cost efficient ways

Ideally, small business owners/managers wanted to be introduced to accessible technology which they could explore themselves. This was a flexible solution for those concerned about committing time and money to ‘training’ or hiring expert sub-contractors:

“

The easy way would be someone who’s not obnoxious to come in and show me what could be done and set it up, and then I carry on, or they could take it on.

(Micro, food service, higher level of engagement)

”

By comparison, training offers were not felt to be as appealing for the small private sector business audience:

“

It doesn’t have to be tied to qualifications, or educational providers, or to attaining a certificate because that is a barrier in itself.”

(Stakeholder)

”

Although the idea of ‘training’ did not necessarily appeal, the owners/managers of the smallest and least engaged micro businesses needed support to develop basic digital skills to enable them to benefit from even the most accessible digital solutions.

6. Appendices

Small Business Digital Exclusion: Desk Research Report