Communications Consumer Panel

Micro businesses and communications

Realising the potential

Research Report
July 2014

Contents

Glossary

CCP   Communications Consumer Panel

EU   European Union

ISP   Internet Service Provider

PAYG   Pay as you go

PCW   Price Comparison Website

ROI   Return on Investment

SME   Small Medium Size Enterprise

VFM   Value for Money

VoIP   Voice over internet protocol

VPN   Virtual Private Network

Wi-Fi   Wireless Network

Foreword

The Communications Consumer Panel is an independent group that works to protect and promote people's interests in the communications sector.

The Panel carries out research, provides advice and encourages Ofcom, Government, the EU, industry and others to look at issues through the eyes of consumers, citizens and small businesses.

The Panel pays particular attention to the needs of older people and people with disabilities, the needs of people in rural areas and people on low incomes, and the needs of micro businesses[1], which face many of the same problems as individual consumers. There are four members of the Panel who represent the interests of consumers in England, Northern Ireland, Scotland and Wales.

Since it was created, the Panel has advised on a broad range of issues which it addresses in two main ways:

- Key areas of engagement: substantial proactive work to push an issue up the regulatory or policy agenda or seek a specific change in policy.
- Keep under review: The Panel has also kept many other issues under periodic review and intervened where appropriate – particularly where the Panel has previously raised concerns and stimulated action.

The Panel wished to conduct qualitative research amongst micro businesses to investigate the relationships and issues they have with communications services. The research was partially funded by Ofcom.

The research focused on investigating micro businesses' needs, usage, attitudes and concerns about communications services across fixed line, internet, mobile, and mobile internet. It has provided the Panel with an in depth understanding of the critical role that communications played in enabling micro businesses to function, and the potential for communications to help micro businesses prosper and flourish in the future.

However the research has also revealed a wide range of issues and challenges that micro businesses faced in realising the full potential of communications services and technology within their businesses.

This report forms a key part of the Panel's evidence base for providing strategic advice to Ofcom and others on policy development, and helping to keep the interests of micro businesses at the forefront of future decision making. It will help to ensure that micro businesses receive the service and support that they need and deserve, so that communications become an integral enabler of future prosperity in this critical sector of the UK economy.

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[1] For the purposes of this research a micro businesses was defined as having 0-9 employees (not including the business owner).

1. Key Findings

- Virtually all respondents who participated highlighted the critical and fundamental role that communications played in their business both now and in the future.
- However only a minority of the sample took a proactive and relatively sophisticated approach to communications, delivering tangible business benefits as a result.
- The majority were relatively passive or reactive in their usage and adoption, with many in the sample under-exploiting the potential of communications.
- Overall the sample of micro businesses faced considerable challenges in terms of being able to optimally procure, manage and develop communications within their businesses.
- The research highlighted a number of issues and challenges that micro businesses faced with respect to their communications. These included the following:
- **Key issue #1** Reliability and performance of communications infrastructure. Specific issues included:
  - o Loss of internet service or slow, variable, speeds.
  - o Poor and variable mobile phone coverage.
  - o Poor and variable mobile internet coverage.
  - o Poor customer service response to service faults.
- These infrastructural issues could be highly disruptive to the sampled micro businesses, impairing their ability to function day to day, and hampering operations.
- **Key issue #2** Making optimum decisions and choices. Specific issues included:
  - o Difficulty in comparing information particularly prices and data packages.
  - o A lack of trust in provider claims regarding mobile network coverage and internet speeds.
  - o A general absence of information, advice, and guidance specifically designed for micro businesses and their needs.
  - o Difficulties in calculating the return on capital investments in communications.
- **Key issue #3** Micro businesses may be more reluctant to switch providers particularly internet service providers. Specific issues included:
  - o Concerns over the expected loss of internet and fixed line during the switching process could be prohibitive to switching.
  - o Many of the sampled businesses also felt they were in a relatively weak position in negotiating better deals with existing providers due to their small size.
- **Key issue #4** Micro businesses exposure to risk in relation to communications. Key risks included:
  - o Reliance on residential grade services by a significant proportion of the sample.
  - o Lack of awareness about remote data backup practices.
  - o Lack of awareness about cyber security.
- In terms of the future exploitation of communications, many in the sample were keen to understand how they could use communications more widely and effectively in their business.
- Areas of interest included reviewing and improving their current approach, exploiting online more, investing in new technology, and achieving greater integration and mobility.
- However exploiting communications further required key barriers to be addressed before micro businesses could realise this potential. These included:
  - o Improving mobile network coverage and access to faster and better broadband.
  - o Accessing clearer information and advertising from providers.
  - o Improving micro businesses' knowledge and skills in the area.

2. Executive summary

The importance of micro businesses in the UK economy:

There are 4.7 million micro businesses in the UK today accounting for 32% of employment and 18% of turnover[2]. They represent a very diverse and varied business landscape ranging from sole traders through to business operations more akin to SMEs.

Many of today's most successful large companies and brands started as micro businesses, beginning in some cases as sole traders or small partnerships that later grew into significant commercial successes. The micro business sector therefore serves as the economic and enterprise nursery for tomorrow's big business and micro businesses are collectively a significant contributor to the prosperity of the UK economy, both at home and overseas.

Micro business challenges and how they impact on communications:

The research highlighted that the challenges of running a business were amplified when it was a *micro* business due to its limited size and capacity. The sample of business owners were typically overstretched and time poor, often fixated on the immediate imperatives of acquiring customers and meeting their short term needs. They rarely had the luxury of internal resources to devote to business administration, and generally lacked either capital to invest, or cash to spend, which drove a highly frugal approach to the way they operated.

These challenges were compounded by the day to day headaches of dealing with administration, red tape and managing cash flow. Their physical working environments posed further challenges. A significant proportion of the sampled businesses worked from home, relying on residential services, whilst many other businesses were either operating from premises that were far removed from an ideal office environment, or were frequently on the road or working on site.

The broader context of the economic downturn had added to these challenges. The majority of the sample had been trading since 2008 and for many businesses simply surviving the recession had been a major achievement. Business owners were found to be cautiously optimistic about the general economic outlook, however they were also conscious that they now had to work harder for every pound of revenue brought into the business. Consequently many were focused on increasing revenue and profits over the next 12 months in the hope that the economy was starting to recover.

This context heavily influenced how the sample of micro businesses approached communications services and technology in terms of the following:

- Business owners generally lacked the time and resources to increase their awareness, understanding and knowledge of communications services and technology outside of the confines of their own experiences.
- They were rarely able to delegate communications management to other staff, and generally lacked the budget to contract a 3rd party to support their communications.
- There was an absence of planning and longer term thinking around communications.
- Beyond covering the running costs, making a capital investment in communications could be both impractical and daunting, with other investment priorities often higher on the list.
- Many were dependant on the reliability and performance of residential services and home based technology, including only having access to residential service levels should there be a fault or outage.
- They had a significant need for services and technology that enabled them to work more flexibly and also when mobile, helping them overcome their capacity constraints and operate in challenging environments.

In summary the sampled micro businesses generally lacked the ability to optimally procure, manage and develop their communications, relative to other businesses.

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[2] House of Commons Library Business Statistics.

The importance and role of communications in micro businesses:

Although communications rarely featured in respondents' explicit business priorities over the next 12 months, the vast majority of sampled businesses felt that communications played a critical and indispensable role in their businesses. The significance of communications was further enhanced by the specific pressures of running a micro business as many were acutely conscious that they could not afford to be unresponsive or un-contactable, a fact that had been sharpened by the economic recession. Many business owners felt that if they did not pick up the phone or respond to an email, then any number of competitors would do so, and their accessibility and speed of response made all the difference in acquiring and retaining customers. Even at their most basic, communications therefore played a vital role in helping micro businesses to survive and prosper.

Whilst communications served a range of business purposes across the sample, the most valued purpose was being in contact with customers. Micro businesses consistently emphasised the importance of every single customer to their business, and placed a premium on services and technologies that allowed them to stay in touch and always be contactable no matter where they were. The reliability and performance of these services was therefore vital to a business being able to connect with its customers.

Usage of communications services and technology by micro businesses:

Whilst the sample of micro businesses used a wide range of communications services and technologies, overall usage spanned a spectrum of sophistication.

At the least sophisticated end of the spectrum, a significant proportion of the sample were relatively 'laggard' in their adoption and usage of communications, getting by on the basics, still using relatively old fashioned technologies, and underutilising the potential of online. These businesses tended to be more *passive* in their approach to this area.

The bulk of sampled businesses appeared to be keeping up with broader mainstream adoption and usage, often only changing their communications if customer needs and expectations changed. These businesses tended to be very *reactive* in their approach, but conscious that they could be doing more with communications.

A minority of the sampled businesses were more sophisticated in their usage and tended to be more *proactive* in their approach to exploiting the possible advantages that communications could offer, particularly through the online channel. They demonstrated the potential for micro businesses to use communications to punch above their weight in business terms, enhancing their competitiveness and expanding their market.

These success stories clearly illustrated the significant impact that communications could have on the prosperity of a given micro business. However these examples were in the minority, within an overall sample which had largely underexploited the potential benefits that communications could offer.

Usage across the four services:

Fixed line – was still regarded an essential tool for micro business communications and was seen as central for many businesses who still conducted much of their business through the landline. Others still saw it as critical due to the internet service. Fixed line also played an important role in helping micro businesses give an impression of tangibility and credibility to new and prospective customers. There was limited usage of VoIP amongst the sample. However those using the service were strong advocates in terms of the flexibility, convenience and lower costs that it could offer.

Internet – as expected the internet was widely used amongst the sampled micro businesses but only around two thirds of the sample went as far as having a company website. Standard broadband (ADSL) was most frequently used and generally seen as an essential business tool. Superfast broadband was only used by a minority at the time of the research, but many respondents claimed they would be looking to switch to superfast broadband over the next 18 months, and they were keen to benefit from the expected combination of speed and reliability that would help enable a range of important business applications.

There was some active exploitation of e-commerce amongst a minority of respondents in the sample. Other respondents were considering converting a static website into a transactional website, although such a move often represented a daunting investment decision. However alongside questions of whether or not to develop a website, or move into e-commerce, was the widespread usage of social media for business purposes, in

particular Facebook. Over half of those sampled were using social media for their business, and many saw their usage of services like Facebook as on a par with having a website. Using social media to help project the business online was a significant theme in the research, and the particular characteristics of social media lent themselves very well to the needs and preferences of micro businesses.

Looking to the future, exploiting the potential of online for business purposes was a major area of interest and ambition for many of the sampled micro businesses.

Mobile - mobile was regarded as critical across the sample and well suited to the needs of micro businesses. Mobile technology in general had the potential to enable them to work more flexibly and overcome their capacity constraints. A number of sole traders conducted the vast majority of their business communications through their smartphones using a combination of voice and email to cover most of their needs. Micro businesses were relatively confident in making decisions in this area and out of all the communications services they tended to operate more as a consumer than as a business, often relying on their own, and their staff's, personal phones to cover their business needs. Smartphones were therefore a particularly important tool for micro businesses, and the research indicated that they would remain a central part of their communications setup in the future.

Mobile internet – views on mobile internet frequently overlapped or merged with views on mobile in general with the demarcation between the two services often becoming blurred. The research indicated that mobile internet was still an emerging area for the sampled micro businesses, particularly in terms of harnessing its potential via devices other than a smartphone. However, the potential to be able to use devices such as a tablet whilst out and about represented the optimum balance of functionality and mobility that was particularly appealing to micro businesses.

Micro business issues and challenges with communications:

The research highlighted a number of issues and challenges faced by the sample in using communications services and technology. These included the following:

Key issue #1 Reliability and performance of communications

Fundamentally micro businesses needed their communications to be switched on and to perform to the required standard. The quality of the technical service was of paramount importance. The issues raised by the sample in this area included the following:

Reliability and performance of the internet – a loss of internet service could significantly impair a business from functioning. The impact could be detrimental and highly disruptive, with relatively fragile micro businesses often less able to absorb the resulting loss of business compared to larger businesses. Slow internet speeds were an ongoing issue in rural areas, but were also found in other locations. Micro businesses depended upon the internet for all sorts of key business functions, and slow speeds could significantly hamper their operation. These technical issues could be compounded by poor customer service from providers when trying to resolve the issue.

Mobile phone coverage – mobile phone coverage could be highly variable and consistently poor in certain areas. Around a third of the sample raised issues with respect to reception, and many appeared resigned to having to tolerate suboptimal coverage. Rural locations were the worst affected but the issue could also be experienced in urban locations. Those with poor coverage in and around their business premises found it a major impediment to doing business. For those experiencing coverage issues whilst on the move, poor coverage could be a disruptive irritant and inconvenience. The sample placed a great deal of importance on the need to always be contactable no matter where they were, and the quality of mobile coverage played a critical role in enabling this.

Variable 3G and 4G coverage – whilst mobile internet was a relatively emergent area for micro businesses, many nevertheless depended upon it for a range of business communications functions, particularly those who were heavy users of their smartphones. Many of the sampled businesses reported coverage as an issue either in general, or specifically with regards to lack of 3G, and a minority also complained of lack of 4G coverage. The sample was keen to see the continued roll out of robust and reliable mobile internet in the future.

Customer service and provider response to disruption – customer service issues were primarily raised with respect to how satisfactorily providers responded to internet and fixed line outages, disruptions and dips in

performance. Many of the sampled micro businesses were highly critical of provider responses in this area which could prolong the impact of service disruptions. Those dependent upon residential services could be particularly vulnerable in this area as they only had residential grade service levels to fall back on. Slowness of response, not knowing how long the fix would take, being caught between two different service providers who refused to take ownership, and not having access to assigned engineers, were all cited as specific frustrations and shortcomings in this area.

Key issue #2 Making optimum decisions and choices

The sampled micro business raised a number of specific issues around decision making with respect to communications services and providers. The most significant issues included the following:

Difficulty comparing information – some businesses felt it was difficult to compare information across providers due to complex pricing and packages, particularly for internet and mobile data.

Lack of trust in provider claims – many expressed scepticism about provider claims with respect to internet speeds and mobile phone coverage. The perception was that mobile coverage did not turn out to be as comprehensive as the provider claimed and internet speeds presented as 'up to X MEG' were often regarded as questionable.

Lack of access to information, advice and guidance specifically designed for micro businesses – the majority of those sampled were unable to afford independent 3rd party advice. In addition information, advice and guidance seemed more geared towards either consumers via comparison services, or SMEs via more account managed services from providers or external consultants. The research revealed an unmet need for information, advice and guidance that was specifically designed for micro businesses in this area.

Deciding whether or not to invest capital in communications - micro businesses ability to invest was relatively limited due to financial constraints. However potential opportunities, particularly e-commerce, could be hampered by the difficulties of calculating the return on investment and building a firm business case.

Key issue #3 – Micro businesses may be more reluctant to switch

The research revealed a reluctance to switch amongst the sampled businesses, in particular with regard to fixed internet. A key barrier to switching was the expected service disruption which was seen as intolerable from a business perspective, particularly for those dependent upon residential services. Many who had switched internet providers in pursuit of cheaper costs had often regretted their decision when they experienced a service disruption and poor provider response.

This reluctance to switch needs to be considered in the context of how confident the sample of micro businesses felt about negotiating better terms with their existing providers. Many of the sampled businesses felt that micro businesses were particularly disadvantaged in such negotiations due their small size and limited account value. In their view they lacked the negotiating leverage that larger companies enjoyed with providers, which enabled such companies to secure better deals.

Key issue #4 – Micro businesses exposure to risk

The research revealed that the sample of micro businesses were particularly vulnerable to certain risks due to their approach to communications. Whilst some had learnt about issues such as remote data backup or cyber security the hard way through experience, many others were simply unaware of their exposure in this area. The two most significant risks included the following:

Reliance on residential services – over a third of the sampled micro businesses were working from home either on a full or part time basis. These businesses were therefore more dependent upon the quality of residential services and subject to residential grade support when the service was disrupted.

Lack of awareness about remote data backup – many of the sampled micro businesses were unaware of the need for remote backup of business data. For those that had experienced a loss of business data the impact could be highly disruptive and long lasting.

In addition there was a general lack of spontaneous awareness of the importance of cyber security amongst the sampled businesses. Although few within the sample had directly experienced breaches in security this could become a growing area of risk if more micro businesses engage in e-commerce opportunities.

Unlocking the potential of communications in the future:

Looking forward, across the sample, micro businesses saw communications as continuing to be central and critical to their future. Although many found it hard to be specific, respondents highlighted a number of broad areas where they felt their approach could be developed further. These included:

- A communications review that evaluated their current setup and practices and suggested improvements.
- Further exploration of the business potential of online.
- Investing in more up to date technology, particularly mobile devices such as tablets.
- Bringing about a level of integrated mobility that enabled greater flexibility and agility in their operations.

However the potential to exploit communications further faced two overall barriers; which can be broadly seen as external, (primarily supplier and market driven) and internal, (primarily the understanding of the business owners themselves).

External barriers that the sample highlighted included improving mobile phone coverage and access to faster and better broadband. In addition, providing clearer information and advertising were seen as market related barriers that needed to be addressed.

In terms of internal barriers, these primarily focussed on the general lack of skills and knowledge about communications that was evident amongst the majority of the sample, bar the most proactive and sophisticated users. Furthermore the sample simply lacked the time and resources to devote to investigating the area, either independently or via a 3rd party. This knowledge barrier was further compounded by a general absence of any information, advice and guidance that was specifically designed for micro businesses and their needs.

These barriers will need to be addressed if micro businesses are to realise the potentially significant business benefits that adoption and usage of communications can deliver.

3. Introduction

3.1. Objectives

The core areas the Panel wished the research to answer/address were:

- To understand which communications technologies and services micro-businesses use and their importance to the business.
- What are their experiences of the communications sectors and services? To include: fixed line, mobile phones, fixed broadband, mobile broadband (including superfast broadband where relevant).
- What are the barriers and challenges, and what are the opportunities?
- What, if anything, should or could be done to improve communications experiences to contribute to greater growth?

In November 2013 the Panel commissioned Jigsaw Research to carry out qualitative research to address these objectives.

3.2. Methodology

An overall sample of 115 micro businesses was recruited to participate in a qualitative research study. The qualitative methodology involved three strands, including the following:

- **Strand 1:** All 115 businesses participated in an online pre-task prior to being interviewed. The pre-task consisted of a questionnaire which captured basic information relating to the business itself, and their usage of communications services and technology.

Following on from the pre-task:

- **Strand 2:** 75 of the participants were interviewed in depth by telephone using a semi-structured discussion guide with open ended questions.

- **Strand 3:** 40 of the participants were interviewed face to face on their business premises. 10 of the face to face interviews were filmed to help bring the topic to life.

It is important to note that the findings in this research are qualitative only and are not statistically valid. Whilst numeric findings are included in this report they are derived from low base sizes and intended to support and substantiate the qualitative analysis. Any numeric findings should therefore not be considered as statistically representative of the micro business population. The methodological strand from which specific numeric analysis is derived is clearly labelled throughout the report.

4. Sample Profile

115 micro business owners took part in the research. Quotas were imposed on the sample to ensure that the research covered all the criteria that could impact on communications usage. Specifically quotas were imposed on: size of company, sector, turnover, location (rural vs. urban, etc.), region (nation and region within England), gender of business owner, age of business respondent, disability and ethnicity.

As this was primarily a qualitative project, weighting has not been applied. Again, it is important to note that the overall sample size means the sample is not representative of the total micro business population.

The composition of the sample is shown in the tables and charts below:

Figure 1: Size of company, turnover and age of business (total screener sample: 115)

Size of company	Percentage of sample (%)
7-10 people	22
4-6 people	22
2-3 people	26
1 person	30
Turnover	Percentage of sample (%)
Over £500,000	9
£250 - 500k	11
£100 – 250k	23
£75 – 100k	12
£50 – 75k	15
£25 – 50k	14
£25k or under	16
Age of business	Percentage of sample (%)
20+ years	23
10-19 years	25
6-9 years	18
2-5 years	18
6 months to 2 years	13
Less than 6 months	3

Figure 2: sector and establishment/'style' of working

Sector	Percentage of sample (%)
Professional	18
Wholesale/retail	16
Hotel/catering/food	16

IT/communications	10
Construction	9
Arts/recreation	8
Production	7
Public administration	6
Primary	6
Finance/insurance	5
Establishment/style of working	Percentage of sample (%)
Office based	21
Mainly office (sometimes home)	27
Mainly home (sometimes office)	9
Home based	27

Figure 3: personal characteristics of micro business managers
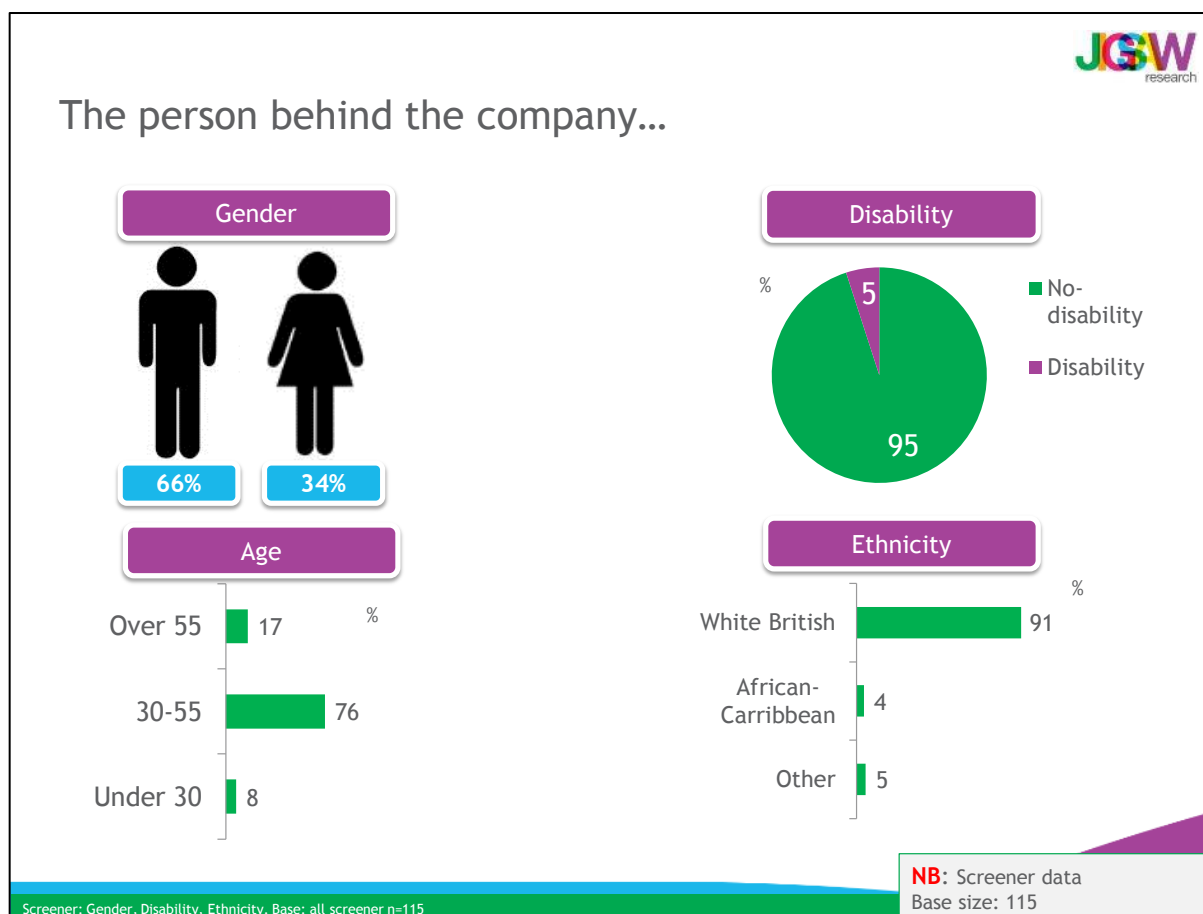
The most frequently mentioned job title was owner/manager, mentioned by about three quarters of respondents. This was followed by Partner/Managing Partner, mentioned by one in five. Managing Director was also mentioned by a small number.

Figure 4: Urbanity

Urbanity	Percentage of sample (%)
Urban	29
Suburban	42
Accessible/semi-rural	20
Deep rural	9

Figure 5: Region

Region

Scotland: 20%

NI: 20%

England: 40%

Wales: 20%

%

SE	9
London	8
Midlands	5
NE	5
SW	4
NW	3
East	3
Yorks/Humber	3

Screener: Region, type of location Base: all screener n=115

NB: Screener data
Base size: 115
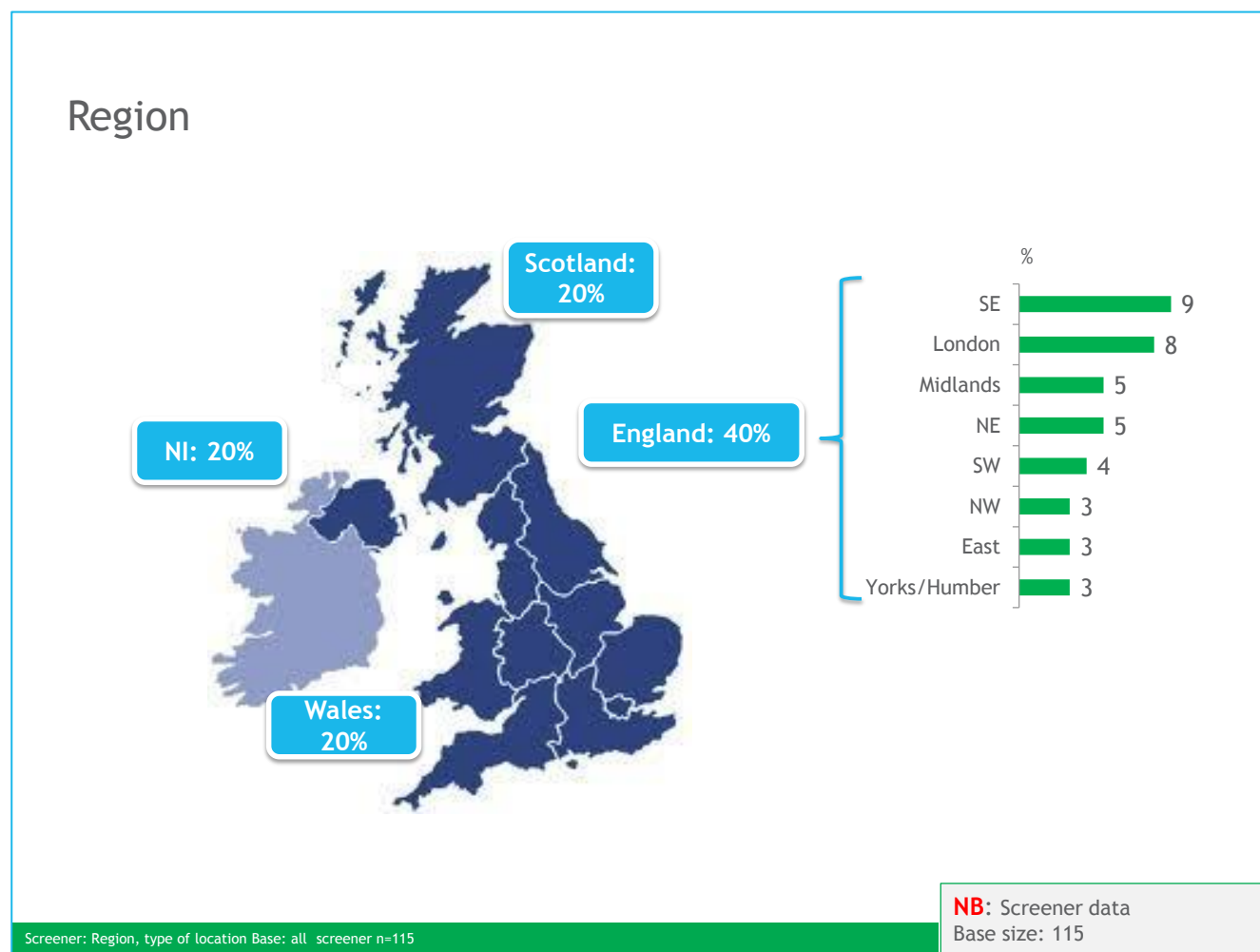
Main Findings

5. Understanding micro businesses

Understanding the approach of micro businesses to communications required an initial understanding of their broader business outlook and culture. Their approach to communications was often a reflection of, and shaped by, this context.

The sample of micro businesses were highly diverse. They ranged from sole traders, through to business operations that were more akin to SMEs. Some went about their business in what could be described as a relatively professional, planned and purposeful manner. Others could be described as much more improvised with only a very rudimentary sense of themselves as 'a business' or simply wishing to 'earn a living' or maintain a certain lifestyle. The sample of micro businesses therefore demonstrated a huge variety of approaches towards running a business, and indeed motivations for starting the business in the first place.

5.1. Motivations for starting a business

The research revealed that people started a business for all sorts of different reasons. A very diverse range of motivations were evident across the sample, and multiple motivations existed within a single business. Some respondents had deliberately set out to start and grow a business whilst others had gradually emerged into a business, sometimes starting off as self-employed and evolving into a more substantial operation over time.

Overall five broad types of motivation were evident. These included the following:

- Artisanal and craft based – certain businesses had started from a particular interest or skill in making a product. Such business owners could be very passionate about what they did and tended to be highly product focused in their outlook.

- Trade and profession based – many businesses were focused on delivering a particular trade such as painting and decorating, plumbing and other manual trades. In addition some were professions based, offering services such as accountancy and legal advice.

- Continuing the family business – a proportion of business owners were carrying on the family business, started by their parents.

- Lifestyle and independence – for some respondents the motivation to set up a business arose from a desire for independence, seeking a work/life balance or to 'be your own boss'.

- Entrepreneurial – a number of respondents had set out to develop an innovative business with relatively ambitious plans for growth and success. These businesses tended to be more planned and professional in their approach, as well as demonstrating a stronger predisposition to risk taking relative to other businesses.

The degree to which business owners could be described as 'managerial business professionals' varied very widely. A minority of the sample could be described in this way, and demonstrated a relatively advanced level of business and operational planning which was more akin to larger businesses. Indeed some of the larger micro businesses (6-9 employees) had previously been larger enterprises within the SME size band but had shrunk as a result of the economic downturn. These companies were usually determined to return to their former size and growth trajectory once the economic situation had improved. It should also be noted that a number of businesses were managed by people who had experience of working in a larger business. However the more common approach taken to business planning by the majority of the sample could be described as improvised, emergent and opportunist, evolving over time, rather than through a planned and deliberate business strategy.

> *"My parents actually started this business eleven years ago and now my father is approaching eighty I try and do what I can as their daughter, and so that means I have taken on more and more. So I now deal with effectively running the company".*
> (Kitchen Worktop Manufacturer, Suburban England)

> *"I eventually opened up a salon …moved up to here, my sister is a hairdresser so we work beside each other and we work in the same premises together. I have been here two years now this April".*
> (Hairdressing Salon, Urban Northern Ireland)

5.2. The challenges of running a micro business

The challenges entailed in running any business were amplified when it was a micro business. The common pressures that can be found in any small business were sharpened when running a micro business because of its small size and limited capacity. Fundamentally they did not have the same depth and resources that larger

businesses would be able to utilise, and they were always seeking ways and means of overcoming these capacity constraints. In addition, they were sometimes relatively fragile organisations that were less able to absorb and withstand the shock when things went wrong with the business.

The following were mentioned repeatedly and represent some of the most frequent challenges experienced by micro businesses.

- Every customer counts – all businesses depend upon their customers, but micro businesses believed that they could not afford to lose a single customer and that every customer made a difference to their prosperity. They were therefore fixated on delivering what the customer wanted, and adapting to changing customer needs was an ongoing challenge.

- Overstretched business owners – many of the business owners who participated in the research highlighted the fact that they were often working at full stretch. Even in the larger micro businesses (6-9 employees), staff were typically involved in delivery whilst the business owner would be responsible for everything else. This included all the business administration, marketing (and very often sales), managing customers and organising the operations. In addition many business owners were still involved in delivery as well as management. This meant that business owners themselves were particularly stretched having to turn their hand to a wide range of business administration tasks.

- A lack of internal resources – one of the key reasons why business owners were relatively overstretched was due to a lack of internal resources to devote to business administration. Staff and employees tended to be dedicated to delivery, and business owners rarely had the luxury of being able to deploy employees to tasks or work outside of their core delivery role.

- Financial constraints – businesses in the sample had to be highly frugal. They tended to lack capital and cash to invest and spend. They saw themselves as cash poor and therefore making any kind of financial investment was a significant step. Across the sample, business owners typically did not have significant amounts of capital to invest, and if they did they often prioritised investments such as new premises or new tools and machinery as opposed to communications. In addition they were keen to keep an eye on costs and pursue any cost saving opportunities by default.

- Short term focus – for many businesses short term survival and running the business day to day dominated their outlook. Business owners were typically unable to look beyond the 'here and now' of short term expediency and keeping the business going. This focus on the short term had obviously been increased due to the economic recession.

- Particularly time poor – whilst business people in all contexts would probably describe themselves as 'time poor', micro businesses considered themselves to be particularly lacking in time due to the twin pressures of business management and a lack of internal resources, as outlined above.

"When you are running your own business you have to be a jack of all trades because you have to do a bit of everything". (Cleaning Company, Urban England)

*"You are every department". (*Nursery, Suburban England)

"I run a pub, restaurant, it is 60% food and 40% wet, it is approximately four miles from the town centre and people travel for a twenty mile radius to come here. You have got to do good food nowadays because otherwise you would never survive". (Pub, Rural Wales)

In addition to these structural challenges, micro businesses faced day-to-day obstacles that got in the way of running the business. When asked in the semi-structured telephone interviews *what are the main things that get in the way of running your business and you would want to get rid of?*

The main obstacles were administration and red tape, combined with costs and cash flow. These obstacles and irritants are detailed in figure 6 below:

Figure 6: Issues that get in the way of running the business

Issues that get in the way of running the business

Top 10 things that get in the way of running the business (18% say 'nothing')

%	
Admin	16
Regulation & red tape	15
Costs/cashflow	11
Mobile coverage	7
Nuisance calls	7
Slow internet	5
Travel time to jobs	5
Frequent need to purchase	2
Email overload	2
Communications package	2
Competition	2
Other	21
Not much/nothing	18

Key
- Non-Comms related
- Comms related
- Not much/nothing

Includes:
-Unpredictability
-Time poor
- Old kit
-Staff issues
-Weather
-Customer issues

Semi Structured Q4. What are the things that get in the way of running your business and you would want to get rid of Base: all answering semi-structured n=61

NB: Semi-structured interviews Base size: <75

In terms of the implications of these challenges for communications, these included the following:

- Generally the sample of micro businesses faced considerable challenges in terms of being able to optimally procure, manage and develop their communications, relative to other businesses.
- They were less able to delegate communications management to other staff.
- They rarely had the budget to contract a 3rd party to support their communications.
- There was an absence of planning and longer term thinking around communications.
- Beyond covering the running costs of communications, making an investment (such as making a website transactional) could be both impractical and daunting, with other investment priorities higher on the list.
- They lacked the time and resources to increase their awareness, understanding and knowledge of communications services and technology outside of the confines of their own experiences.

5.3. Working environments

The diversity evident amongst the sampled micro businesses was also reflected in their working environments and the range of business premises from which they operated. As noted in the Sample Profile section, 27% of those sampled were solely home-based and 9% were mainly home-based, with a further 27% sometimes working from home. The business premises encountered during the face-to-face interviews were rarely typical offices. Beyond those working primarily from their home, others could be venue based such as a restaurant or hotel. Other businesses were run out of a workshop, warehouse or retail premises. Many micro businesses and their owners were often out and about, site-based or visiting customers.

Specifically the working environment generated a number of issues for how micro businesses approached their communications. These included the following:

- Reliance on residential services and home based technology. Those working from home were almost all dependent on the reliability and performance of residential grade services, particularly with respect to the internet. For some this had enabled access to fibre broadband. However the potential downside of this reliance on residential services was that if the service was disrupted the business owner may only have access to residential service levels for restoring the service and responding to such issues.
- A strong desire for services and technology that enable them to work more flexibly. Micro businesses placed particular value on services and technology that enabled them to work more flexibly when mobile and out and about, as a way of helping them to overcome their capacity constraints, which were a constant challenge.
- Fitting communications services around relatively challenging physical environments. Many of the businesses did not have a formal office, and amongst some of those businesses that did, the office was often their secondary work environment. In such cases the office could often be a small back room or basement, a storage area, or even a reception desk or till area. In contrast their primary working environment could be a workshop or warehouse, a retail outlet or venue such as a restaurant or hotel, or an outdoor facility such as a farm. Therefore outside of office based working environments, the setup of communications was often not integral to the primary working environment.

5.4. Economic outlook

Across the sample almost two thirds of businesses had been trading since before 2008. The majority of businesses in the sample had therefore been through economic difficulties and for many just surviving the recession was seen as good enough in terms of performance. Business owners were very conscious that they now had to work harder for every pound brought into the business, and the challenges of the current economic climate had compounded the 'normal' challenges of sustaining a micro business. This context drove an even greater reluctance to make significant investments.

However many business were relatively positive about the longer term economic situation. When asked: *thinking about the economic situation, how positive do you feel about the next 12 months?*

21% of the sampled businesses were 'very' positive and 69% were 'fairly' positive. Many businesses were therefore cautiously hopeful that the economy was slowly starting to recover and that the next year would be more positive in economic terms. That said 1 in 10 businesses were still very uncertain about the future outlook.

5.5. Business priorities

In terms of business priorities over the next 12 months, improving profits, sales and the customer experience, were the main priorities going forward for more than half of the qualitative sample, as detailed in figure 7 below. Many micro businesses were particularly keen to see their revenue and profit increase in the next 12 months having experienced a relatively flat economy for the past few years.

It should be noted that technically this chart includes both 'priorities' and the 'methods' by which these priorities will be addressed. This is itself reflective of the micro business mind set. Whereas a larger company may recognise the difference between priority and method, for these businesses the difference is blurred, and the introduction of a new method may itself be seen as a business priority.

Figure 7: Business priorities over the next 12 months

Business priorities over the next 12 months

Business Priorities (next 12 months)

%

Priority	Value
Improving profit	68
Improving sales in general	61
Improving customer experience	54
Improving quality	42
Attracting/retaining good employees	39
Responding to market change	38
Product innovation	38
Managing peaks/troughs of customer demand	36
Better business intelligence	35
Improving online presence	35
Reducing supplier costs	34
Becoming more efficient/productivity	33
Managing customer relationships	33
More effective communication/teamwork between staff	32
Improving communications technology	32
Improving financial management/cash flow	25
Working efficiently with suppliers	24
Systems for mobile/remote working	22
Partnerships with other businesses	20
Managing change	19
Increasing compliance	17
Expanding business (UK)	17
Growing headcount	12
Reducing IT costs	10
Improving security/access to info	10
Expanding business (abroad)	5
Reducing number of staff	1

Key
- Non-Comms related
- Comms related

Improving online presence is the top communications priority

NB: Pre-task interviews
Base size: <115

Pre-Task Q4. Priorities for your business in the next 12 months. Base: all answering pre-task n=106

Following on from their main business priorities, communications did feature, in particular improving their presence online and improving their communications technology. However driving profit, sales, and quality dominated their outlook.

6. Importance and role of communications

6.1. The critical importance of communications to micro businesses

Although communications did not feature in micro businesses' top business priorities for the next 12 months, when prompted communications were seen as playing an essential role across most businesses. The majority of sampled businesses agreed that communications would be vital to the success and survival of the business. Virtually all businesses felt that communications played a critical role in sustaining the business, even if they were only using relatively basic services, and there was a general perception that the business would simply not be able to function without these indispensable and essential services.

The significance of communications was further enhanced by the specific pressures of running a micro business. Many were conscious that they could not afford to be unresponsive or un-contactable, a fact that was sharpened by the economic recession, and having to pursue every pound of revenue. Many business owners felt that if they did not 'pick up the phone' when a customer called then someone else would, and their accessibility and speed of response would make all the difference in acquiring or retaining customers. Communications were therefore critical in helping micro businesses overcome their capacity constraints and work around their limited resources.

Figure 8 highlights the importance associated with communications. The chart on the left details answers to an unprompted question. It can be seen that voice communications (both fixed line and mobile) are mentioned more than any other type of equipment. This finding is supported when respondents rated different technologies according to the importance to the business (the right hand chart) were very high scores were given for voice services, as well as for fixed broadband.

> *"Communications are massive, it is as simple as that. You just basically can't survive day-to-day without it. Be it the internet with emails, telephones and so forth. Landlines I am not so keen on because I think it is a bit of a waste of money, nobody seems to use the landlines now, but if you have a website, and you have a business card, and you don't have a landline contact, I think people would be sceptical to order from you".* (IT support company, Urban England)

Figure 8: The importance of communications technology to the business

Importance of communications technology to the business

Essential things for running the business... (open ended question – not tech specific)

%

Mobile phones	41
Landline	37
Internet/Broadband	25
PC/laptop	24
Equipment/tools (non...	21
Business supplies (non...	19
Vehicle	14
Communications...	8
Email	8
Website	5
Mobile email/Internet	3
Industry specific software	2
Software package	2

Key
Non-Comms related
Comms related

How important (1-100) are each of the following to your business

%

	91-100	71-90	31-70	1-30
Fixed/landline phones	58	12	13	17
Mobile phones (incl. Smartphones)	51	22	22	5
Fixed Internet/Broadband	44	25	28	3
Mobile Internet/Broadband	30	26	21	23

Pre-task Q4 How important are each of the following to your business? All answering fixed/mobile/BB/mobile Internet n=90/95/89/86
Semi structured Q3. What are the things you could not do without running your business? Base: all answering semi-structured n=63

NB: Pre-task interviews
Base size: <115

6.2. The role of communications in meeting business needs

Across the sample, business needs and priorities did not always fit within a consistent hierarchy, and varied widely according to the nature of a given business. However crude prioritisation of business activities emerged in terms of the following:

Activities

- Creating a 'product' – micro businesses could be very product focused and generally first prioritised developing a particular product, proposition, service or experience, before trying to sell or market it.
- Selling the product – the next priority was generally to sell the proposition, either via 'outbound' efforts (sales calls, direct marketing, etc.) or attracting customers and delivering the proposition to them.
- Establishing the supporting administrative and business processes – following on from these first two priorities was orchestrating the business administration to sustain the operation and keep it going from day to day.

In carrying out these activities micro businesses generally engaged three audiences as outlined below:

Audiences

- Customers – this audience was seen as of the most important and a range of channels was generally used to engage with them.
- Staff – depending upon the size of the business it was critical for staff to be in contact, particularly if they were out and about and conducting business away from main premises.

- Suppliers – could be contacted via a range of channels, but mainly by phone and email.

Communications purposes

The combination of these activities and audiences in turn drove a range of purposes for communications within a given business. Again, given the diversity of micro businesses, prioritising these purposes varied significantly from business to business. However a broad order of priority emerged in terms of the following:

- Being in contact – micro businesses placed a great deal of importance on being in contact, in touch and accessible, primarily with customers, but also other audiences such as staff and suppliers. This was mainly by phone and voice. This was arguably the most fundamental purpose of communications, and was a 'basic' need for all organisations.

- Selling and marketing to customers – beyond being in contact with, and accessible to, customers, micro businesses were very focused on using communications for the purposes of selling to customers. This priority could potentially be delivered through a range of services that enabled the businesses to display and share their products, such as websites, or interact with customers via services such as social media, or more traditional sales calls.

- Transacting with customers – this moved beyond simply using communications to sell and market, to the actual point of sale itself. Communications could support this purpose in a range of ways, whether enabling a card machine to function effectively in a restaurant, or paying online via a transactional website.

- Processing and administration – administration was often ad-hoc in micro businesses but many were now using communications to facilitate this element of their business. This included things like emailing invoices to customers, emailing delivery information or work orders to staff, or using communications for back office processes such as online banking and accounting.

- Accessing and storing information – this was another area which could often be treated in an ad-hoc manner. However, some micro businesses were beginning to use shared files accessible by Virtual Private Networks (VPNs) and Cloud storage to increase efficiencies (and save money) in this area.

The analysis of the semi-structured interviews supported the idea that the major needs that communications met were 'staying in touch' and being contactable, as illustrated in figure 9 below:

Figure 9: Needs met by communication in the business

Needs met by communications in the business

Reasons communications are important

%

Staying in touch with customers	23
Keeping in touch - in general	19
Being contactable	17
Staying in touch with suppliers	13
Using Internet	9
Generates business	3

Q76 Overall importance of communications to the business. Why? In what way? Base: all semi-structured n=64

NB: Semi-structured interviews
Base size: <75

In addition when asked how important each of the technology areas were in terms of their business, fixed line telephony and mobile phones were ranked as more important than fixed internet/broadband and mobile internet.

This further underlined the importance micro businesses seemed to place on voice communications and being in contact with customers by phone, whether fixed line or mobile.

That said, there was considerable support for fixed broadband as being the most important communications technology they were using, and a minority rated mobile broadband as most important. The latter point is of interest as it may signify the beginning of a trend towards mobile communications, enabled by the combination of 4G and smartphone technology.

A focus on micro business owners with a disability:

The research sample included a sub set of micro business owners with a disability to explore whether having a disability gave rise to any specific issues with respect to communications.

A total of six respondents were recruited, with a range of disabilities that included hearing or visual impairment, mobility difficulties, rheumatoid arthritis and multiple sclerosis. The levels of disability across the respondents ranged from relatively mild to more severe difficulties, although none had been prevented from working by their condition at the time of the research.

Overall responses to the topic of communications services and technology were very consistent with the broader sample of business owners. As micro business owners these respondents by and large faced the same issues and challenges that other micro businesses faced in understanding and using communications within their particular business context.

However there were three differences that emerged from this element of the sample. These included the following:

Enhanced importance of mobile communications:

Mobile technology was seen as having enhanced importance to business owners with mobility constraints by allowing them to access work from any location via a mobile device.

Increased reliance on residential services:

Business owners who experienced mobility constraints also placed greater importance on their reliance on residential services and being able to work at home as and when required. At certain times it was particularly challenging for them to journey to their work premises or a business meeting and therefore being able to conduct their business entirely from home was of particular value.

Strong interest in adapting technology to their needs:

An additional difference that emerged from business owners with a disability was around being able to access and procure technology that was adapted to their specific needs. This was particularly with respect to respondents who experienced difficulties in manipulating key boards and key pads, a task that could become more challenging when using mobile devices. Respondents expressed a strong interest in exploring technology that provided easier to use key pads, voice control technology, and advanced headsets that would allow them to work more easily. There was some awareness that such technology was available on the market, however few had directly experienced such devices. Respondents welcomed the idea of being provided with access to such technology either through providers or independent sources.

> *"I am trying to find a headset at the moment compatible with my wireless telephones. I have problems writing and therefore it is very difficult for me to hold a phone with one hand and write with the other. So if I have got a hands-free headset that would solve a lot of problems for me".*
> (Kitchen Worktop Manufacturer, Suburban England)

> *"Touch screen is a godsend because a lot of them use predictive text as well, and it will correct it when I'm typing. Digit control and pressure is much harder on a laptop for me".*
> (Vehicle Graphics Company, Urban Scotland)

> *"Better voice activation would be useful so I don't have to type as much, but it needs to be more accurate and better at recognition".* (Vehicle Graphics Company, Urban Scotland)

7. Usage of communications services and technology

Generally speaking, micro businesses used a wide range of communications services and technologies. Figure 10 summarises the communications technologies being used.

Figure 10: Communication technologies used by micro businesses

Communication technologies used by micro businesses

Technologies use/plan to use

Technology	Currently use	Plan to start/increase using
Fixed/landline telephones	91	8
Smartphones	90	10
Laptop	67	8
ADSL broadband	63	4
Mobile Internet (via dongles or…	57	11
PC	55	3
Tablet	47	9
Mobile phones (non Smart)	26	3
Superfast fibre broadband	22	25
Cable broadband	17	3
Dial up Internet	8	1
Other broadband	3	

90% use some form of fixed broadband

98% use some form of mobile –that's higher than fixed line usage!

68% use bundled services

Mobile internet includes dongles, MiFi, and enabled devices (smartphones/tablets)

Pre-task Q6: Which of the following communications technologies or services does your company use currently? Pre-task Q7 Which does your company plan to start using?: All answering pre-task n=115/106

NB: Pre-task interviews Base size: <115

Fixed/landline telephones were used by just over 90% of businesses in this sample. When usage of smartphones and regular mobile phones is combined, it is apparent that 98% of the businesses interviewed were using mobile phones. Mobile phone usage was therefore higher than fixed line telephone usage for this sample.

90% of the sampled businesses claimed to be using some form of broadband. 8% claimed they were still using dial-up which seems high given what is known of the market and technology trends. It may be that some respondents misunderstood the terminology.

68% of the micro businesses in the sample were using bundled services. The main reasons given for choosing bundles when mentioned in interviews revolved around the relative ease and convenience realised by simplifying payments, management and so on, if all services are from one supplier. Marginally lower costs were also seen as an advantage as it was generally perceived as cheaper to get more services from a single supplier.

Residential services were being used by a sizeable proportion of both fixed line users and fixed broadband users (between two fifths and one half for both according to the semi-structured data).

7.1. Usage and sophistication spectrum

When it came to overall usage of communications a very broad range of sophistication was evident across the sample. Some sole trader businesses were run largely from one device such as a smartphone. Some could be described as relatively behind in their adoption of technology and services that were largely seen as mainstream elsewhere. At the more sophisticated end of the spectrum, some businesses were being much more proactive and purposeful in their approach to their communications, using social media to its full potential, engaging in e-commerce, and adopting relatively advanced services such as VoIP and so forth.

Overall usage and sophistication fell into three broad segments which have been entitled 'passive', 'reactive', 'proactive'. These three segments are defined in more detail below:

Passive – Getting by on the basics

A minority of micro businesses were relatively behind in their adoption of communication services and technology. For example they were still using 'old fashioned' mobile phones i.e. non-smartphones. They may have had access to the internet but did not have any web presence, either in the form of a website or usage of social media or 3rd party sites. Their data was not backed up at all, and they had not seriously considered using communications more in their business in future. Others belonging to this segment may have felt that they could be doing more with communications, but either other priorities were dominant, or they lacked the knowledge and confidence to explore further the potential of communications in their business.

"I have got a landline, a basic mobile phone through (provider) and internet through (provider) as well. I am thinking about getting a computer". (Pub, Rural Wales)

Reactive – Keeping up with the mainstream

The bulk of businesses appeared to be keeping up with mainstream adoption and usage of all the essential services, primarily in terms of broadband, fixed line and mobile, but less so mobile internet. For this segment their approach to communications tended to adapt to whatever the customer needed. As long as they kept pace with what they saw as customer demand and expectations, or what the typical competition was doing, then that was all that was required. Businesses within this segment were therefore more reactive in their approach to changing technology and adopting services. They were more likely to have a website or webpage and use social media, or at least to have started to seriously consider using it. They typically took a 'good enough' stance towards communications, but there was also some awareness that they could be doing more to harness the fuller potential of communications for their business.

Proactive – Exploiting the advantages of communications

A minority of the sample took a more proactive approach to unlocking the potential and benefits of communications in their business. Amongst this segment there was more evidence of e-commerce, VoIP and active exploitation of social media. This segment included some examples where exploitation of communications had made a significant and lasting impact on the performance of the business and had encouraged the business owner to explore further opportunities to use communications more, particularly online. However this general keenness to exploit communications further could require more significant investment on the part of the business.

In terms of how micro business owners self-defined their level of technological adoption and sophistication, they were asked the following:

'Thinking about the many different types of communication technologies available today, ranging from basic internet and phone, through to more advanced forms such as high speed internet, VoIP, teleconferencing, remote access and remote working devices e.g. tablets/smartphones, how important are these types of technologies in running your business? On a scale of 1-10 where 1 is 'my usage is relatively basic, and 10 is 'My usage is highly advanced'

38% defined themselves as high tech, 36% medium tech, and 26% low tech. These findings are illustrated in figure 11 below.

Figure 11: Businesses' assessment of their own level of technology usage

Businesses assessment of their own level of 'technology usage'

Self-assessed tech usage

My usage is highly advanced — 10

High tech 38%

Medium tech 36%

Low tech 26%

My usage is basic — 1

Communications used

N.B. This is a self defining view and micro businesses may overestimate their level of sophistication

Screener Q5b Thinking about the many different types of communication technologies available today, ranging from basic internet and phone, through to more advanced forms such as high speed internet, VoiP, teleconferencing, remote access and remote working devices e.g. tablets/smart phones, how important are these types of technologies in running your business? On a scale of 1-10 where 1 is 'my usage is relatively basic, and 10 is 'My usage is highly advanced' Pre-task Q6 communication technologies used Base: all pre-task n=115

NB: Screener data
Base size: 115

According to these figures micro businesses may have seen themselves as more high tech than they perhaps were when responses were evaluated more objectively. This may be attributed to cognitive bias and a tendency to be overconfident or optimistic when engaged in self-assessment.

However, the research indicated that their assessment was broadly accurate. This was driven by a comparison of the services used by self-defined low tech, medium tech, and high tech businesses. The chart on the right hand side of figure 11 shows that high tech businesses were most likely to be using superfast broadband and mobile internet, and low tech businesses were least likely to be using smartphones and mobile internet.

Case study of a more *proactive* business:

A cleaning company with nine employees run by a young business owner:

The business (located in urban England) was founded in 2008 when the business owner was in their early twenties, and provided domestic and commercial cleaning services. It had nine staff who were all cleaners, except the owner who managed everything else from dealing with customers and managing staff, through to sales, marketing and administration. The business owner was also directly involved in cleaning to cover holidays and absences. The business owner was keen to grow the business and relatively confident with technology.

Sophisticated usage of social media and iCloud services to promote and grow the business:

The owner was a heavy user of Facebook for the business, with over 500 followers and 913 enquiries via their page. They used freely available analysis and insight tools to determine which posts were most engaged with, what would be the optimum time to post, and they were considering whether to purchase the ability to target demographically via the platform.

The business owner had moved all of their hardware to Apple as they liked the integration between devices via iCloud. Doing so had enabled them to use their iPad to manage things like Facebook and other administrative tasks from home, making it easier to work more flexibly.

They had recently purchased four iCloud numbers to suggest premises in three locations outside of their main office. All the numbers looked like local geographic landline numbers, but all diverted through to the owner's iPhone. This allowed the business to compete with larger regional competitors by suggesting a local presence, and enabled the business to expand into different regional markets.

Despite their relative sophistication, poor data backup practices had caused a 'disaster':

They experienced a 'disaster' with their mobile phone a year ago when they lost all of their business contacts. They had to ask all their customers for contact details again, which took about four weeks to fully restore, resulting in a loss of business during this time. Since then they have made sure everything is backed up via iCloud.

> *"It's so much easier having an iPad. Every small business should have one. You can take care of so much from your sofa".*

Case study of a more *reactive* business:

A landscape gardener and sole trader who was always working out and about:

The sole trader (located in urban Scotland), in his late twenties, worked mainly on his own but occasionally took on temporary help in summer months to cope with extra gardening and construction work. The business was registered at his home address but he mainly conducted all his work from his van. He made and received most of their business calls whilst out and about and on the move, and he needed to be responsive to prospective customers, and to get quotes and costs out quickly.

Business was mainly conducted via the smartphone but they kept a landline for appearances:

The business owner's key communication tool was his smartphone and using mobile internet (3G). This was seen as essential to the business as most appointments were generated through phone calls and text messages. He saw his smartphone as a highly versatile device when out and about as it could carry calls, emails, maps, and contact details. The idea of using a tablet was becoming more interesting and appealing as it was more portable than a laptop, but much easier to set up quotes and invoices which was very difficult via a smartphone.

The business owner still had a landline for 'appearances' and to make the business look more 'legitimate'. Whilst the smartphone was also for personal use, he used it primarily for business, and negotiated the best contract he could every two years. Looking for the best coverage was the major decision making criteria as he felt that any downtime would hit him directly in the pocket. In addition he had a webpage which acted as a basic catalogue of his work and client testimonials. This was seen as more effective and cheaper than other advertising routes.

Would like to be able to do more business when mobile in order to keep competing:

The biggest challenge was competition with less skilled and cheaper labour offered by competitors. The business owner invoiced and issued quotes via his laptop from home, but wanted to be able to do this 'on the move' as it could often be a case of the first person to reply gets the job. He felt that another challenge was knowing what help there was for a small business such as his in the area of communications. In the business owner's view the business was too small to be of interest to a telecoms or technology company.

> *"It's important that I don't have [connection] problems. If someone wants to call me, they need to be able to reach me right then or they'll call another number".*

Case study of a more *passive* business:

A craft shop (located in urban Scotland) with two owners who felt their approach was very basic:

Both owners, in their mid-forties, were into craft hobbies, particularly knitting and needle work. In the future they wanted to start running craft workshops as well as keeping the shop going. They were initially sceptical about using the online channel for their business. They believed that customers still needed to come into the shop to see, and more importantly touch, the goods and 'feel the yarn'. In addition there were so many products that they felt it would be almost impossible to put them all online. However footfall into the shop was not very high and it was hard for them to see how they could grow the business without somehow using the online channel.

The business owners took a very basic approach to using technology in general and they were quick to admit themselves that they did not embrace or really understand technology. They did not have an office area within the shop itself. They did not have smartphones but only basic PAYG mobiles. They had no card machine installed and ran a cash only system. In addition, they did not have a landline installed and therefore only used email and the internet when they were at home. This meant they had to work one or two hours at home every evening doing customer ordering and catching up on administration. They were not using online channels such as social media and saw themselves as a long way off having a website, if at all. Therefore when a customer came in wanting to look up something they used paper catalogues and then ordered any stock from home.

They still felt they should and could be doing more but a lack of knowledge and skills was a key barrier:

The business owners were conscious that they could be doing more with communications services and technology, and they had tried to access some advice and help. They had been to the Federation of Small Businesses via their telephone advice line and had looked at getting a card machine once they had gotten a landline installed. They had also done a course with 'Business Gateway' which took them through step by step how to set up a webpage, but they had not pursued this further at the time of the research. They were also interested in using Facebook, but did not use it for personal use and needed to ask a friend to help. Finally they wanted to set up a shop on eBay, but did not know how to do so. They felt they really needed practical and basic 'how to' advice that would help them make the most of the online channel.

> *"We know we are a bit backward and we need to think about these things more".*

> *"If we can do things like set up a shop on eBay then we think things will get better as we don't get many people coming in the shop".*

7.2. Usage by service – Fixed line

Overall

Fixed line telephony was still regarded as a stable fixture within micro business communications choices. It was seen as critical and central for many businesses who still conducted much of their business through the landline. Others saw it as critical due to its enablement of internet services. In addition fixed line also played a role in helping a micro business to give an impression of tangibility and premises to the outside world. There was a general view that prospective customers would not see a business as credible unless it had a fixed line number, and they would be reluctant to approach a business that provided only a mobile number as contact details. This gave fixed line a greater emotional significance for micro businesses.

Figure 12: Overall usage statistics for fixed telephone lines.

Fixed line usage: number and type of lines. Method of making calls and spend.

 # telephone lines used by business

%
- 1
- 2
- 3 to 4
- 5 to 9

9, 8, 20, 62

How fixed line calls made

%
- Primarily traditional telephone line — 80
- Mix TTL and VOIP — 10
- Primarily VOIP — 6
- Don't know — 4

Type of line/service used

Specific business line 56%

Residential line 44%

Approximate spend past 12 months

%
| 14 | 24 | 9 | 34 | 18 |

- >£1600
- £751-1600
- £501-750
- £200-500
- <£200

Pre task T1 How many telephone lines does your business use (actual number of physical lines)? T1a Which of the following best matches what you use? T3a Which best describes how your 'fixed line' calls are made? T12 How vital are fixed/landline services to your business? Base: All answering where service is applicable n=93/77/90

NB: Pre-task interviews
Base size: <115

Most respondents were using one telephone line only (62%). Approximately one fifth used two lines and an equal number used three or more fixed lines. A significant number were using residential lines for their business calls. A minority of respondents were using VoIP.

The majority of respondents were spending less than £500 per year on fixed line phone services.

> *"Within the business we use mobile phones and internet and the landline, but the landline is definitely the most important, and we have had the landline here since we started the business twenty-three years ago. It is good in that people are phoning us all the time to make bookings and we know that we can rely on the landline, and over the years there have only been a few issues when the landline has been down due to trees and storms and so on, but really it is constantly there and it is essential for the business".* (Equestrian Centre, Rural Wales)

"Obviously telephone is a big part of our business. We take orders on the telephone, we take bookings on the telephone, and we have to place orders by telephone and stuff like that. Most of our orders, day-to-day orders we place by telephone". (Restaurant, Urban England)

"We have four incoming landlines which we use to call companies and insurance companies for authority and queries on parts and technical backup. The engineers obviously call us on those lines as well and we receive calls from the customers". (Appliance Company, Urban England)

More advanced usage

As already outlined, there was some limited usage of VoIP amongst the sample. Those who were using it tended to be more technologically advanced businesses and were strong advocates of the service. For these businesses the benefits were seen in terms of the following:

- Flexibility – users found it relatively easy to scale up and scale down with little delay in getting a new line enabled. This appealed strongly to micro businesses whose needs could fluctuate and who could ill afford the cost of any delays in enabling a new employee to use the phone.

- Able to self-service – those using the service found the ability to be able to set up a new line by themselves relatively useful. However the businesses using VoIP tended to be more knowledgeable about technology and therefore more able to self-serve in this area.

- Lower costs – Users of the service advocated it in terms of cost, including both installation and running costs, relative to conventional fixed line.

However VoIP was dependent upon having reliable and adequately performing internet services. It could therefore be vulnerable to disruptions to the internet service, should they occur, and for some businesses operating in rural areas, VoIP was not an option as their internet service was not reliable enough.

7.3. Usage by service - Internet

Overall

The internet was cited as being widely used amongst the sample, but only 65% of the participants had a company website. Beyond projecting the business online, the overall role and importance of the internet was seen in terms of emailing, conducting research, and sourcing and ordering.

Figure 13: Overall usage statistics for fixed internet services[3].

Internet usage: Type of internet used, approximate spend and perceived benefits of broadband

Type of internet used

	Currently use	Plan to start/increase using
Standard broadband	63	4
Superfast fibre broadband	22	25
Cable broadband	17	3
Dial up Internet	8	1
Other broadband	3	1

Approximate spend past 12 months

%	>£1600	£751-1600	£501-750	£200-500	<£200
	6	12	8	36	36

Benefits of fixed BB for the business

%	
Essential to business	38
Quicker access info	31
More visual	12
Real time communication	12
Convenience	10
Makes business faster	10
Reliable/always there	8
Use for research	6
More secure than mobile...	6
Others	6

NB: Semi-structured interviews Base size: <75

NB: Pre-task interviews Base size: <115

Pre-task Q6: Which of the following communications technologies or services does your company use currently?

Semi-structured Q46 How would you describe the benefits of BB for the business? Q47 Base: All answering semi-structured n=52/53

Standard broadband (ADSL) was the most frequently cited form of internet amongst the sample. When asked about the benefits that using broadband gave them, the most frequently recorded answer was that it was essential to the business, underlining both how important it was, and how completely it had become an 'essential business tool'.

The majority of businesses were spending less than £500 on their broadband service per annum.

Superfast/fibre broadband

Superfast broadband seemed to have captured the imagination of micro businesses. Although only used by a minority of micro businesses at the moment (22% of the sample), this figure looks set to double in the next 12/18 months as a further quarter of respondents claimed that they would be switching to it in the next year.

Most frequent current usage of superfast was found amongst the following:

- Those with over £250k turnover.

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[3] 'Other broadband' could include services such as SDSL and Satellite

- Those with 7-10 employees.
- High tech companies.
- Businesses **NOT** located in deep rural or inaccessible rural areas.

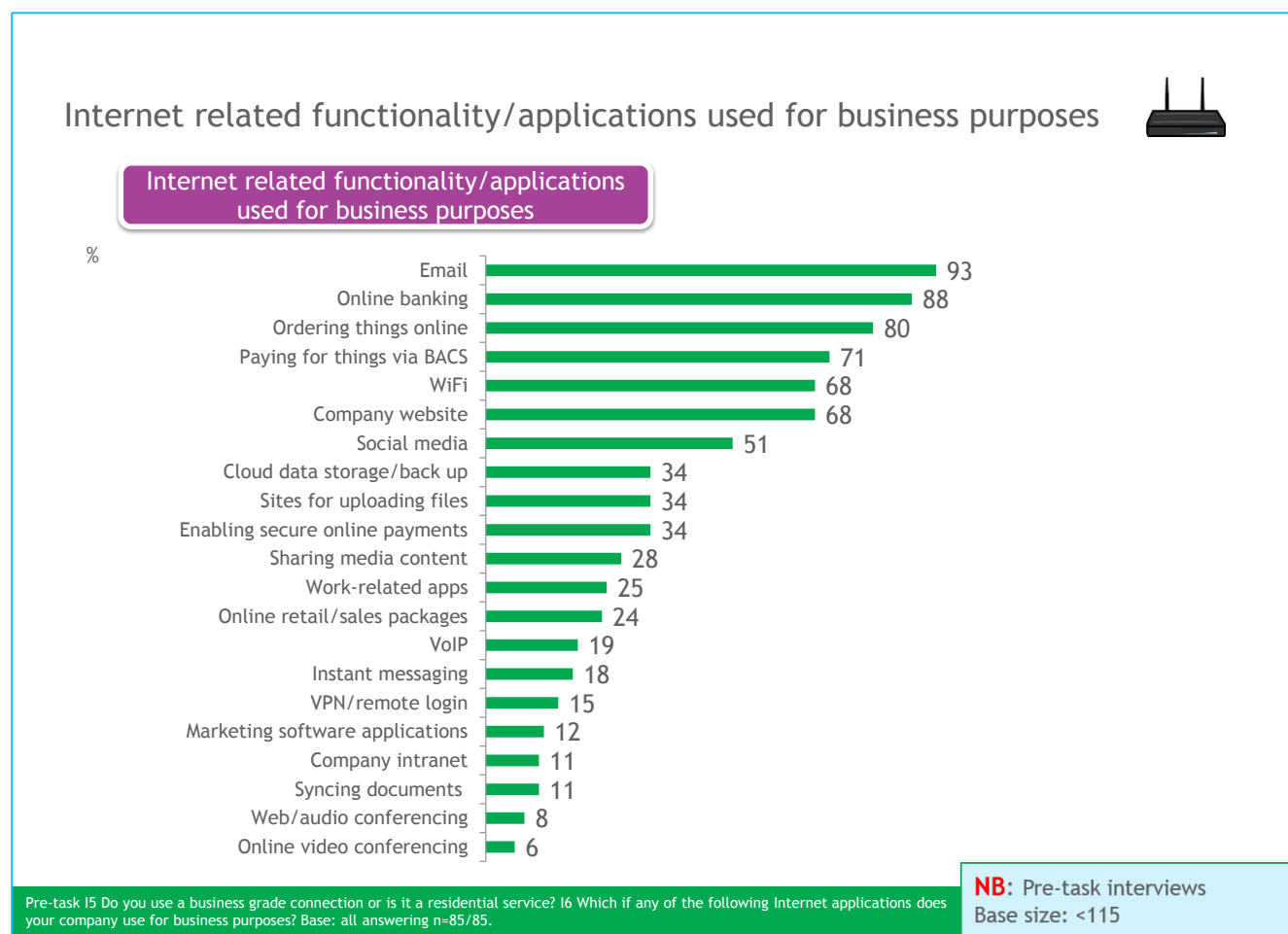The picture changed when looking at likelihood to start using superfast in the next 12/18 months, where the following were most likely future users:

- Those with under £50k turnover.
- Those in accessible rural or suburban areas.
- High tech companies.

Reasons for purchasing or planning to purchase superfast broadband were touched on in the qualitative interviews.

The main benefits were felt to be a combination of speed and reliability as it could handle more data, and there would presumably be less crashing, overloads and outages. Superfast was also seen as enabling applications such as VoIP and Cloud based software or storage. These services had in some cases been out of reach of micro businesses in the past as they could not afford or access a fast enough internet connection to use them.

Figure 14: Applications for which the internet connection was used

Internet related functionality/applications used for business purposes

Application	%
Email	93
Online banking	88
Ordering things online	80
Paying for things via BACS	71
WiFi	68
Company website	68
Social media	51
Cloud data storage/back up	34
Sites for uploading files	34
Enabling secure online payments	34
Sharing media content	28
Work-related apps	25
Online retail/sales packages	24
VoIP	19
Instant messaging	18
VPN/remote login	15
Marketing software applications	12
Company intranet	11
Syncing documents	11
Web/audio conferencing	8
Online video conferencing	6

Pre-task I5 Do you use a business grade connection or is it a residential service? I6 Which if any of the following Internet applications does your company use for business purposes? Base: all answering n=85/85.

NB: Pre-task interviews
Base size: <115

Email and online banking were the most commonly used applications and services. This was a characteristic of the micro businesses in the sample, where the majority were mainly using relatively basic services.

However some more sophisticated services were being used by sizeable minorities of micro businesses. These included Cloud storage, VPN, VoIP and web/audio conferencing.

"The internet is very important to us. We have got a client who rang us on a Saturday and needed us to access his system (because he was heading off to Dubai on Monday morning) and get a new system set-up with all his emails downloaded onto it". (IT support company, Urban Northern Ireland)

"I have got Wi-Fi, it is more for my customers rather than my personal use because a lot of customers are coming and using the iPad, because I have got free Wi-Fi here". (Pub, Rural Wales)

More advanced usage

There was some involvement in e-commerce amongst the sample with others considering converting an existing static website into a transactional one. The main e-commerce activity involved enabling customers to book, order and pay online. In addition there was some engagement with 3rd party websites that would enable transactions over the internet whether this was travel booking sites for small hotels and guest houses, or an eBay shop for retailers.

"I guess the online ordering and delivery service is really where we've pushed it a bit more. Whereas if you would have a quiet night because it was really raining and no one was coming out, it would get people ordering online because they don't want to go out. So in that way the online ordering has pushed a lot more business towards us". (Restaurant, Urban England)

For those other businesses considering moving into e-commerce this was seen as potentially requiring significant investment, and they could be unsure of what the return might be. This level of ambiguity around the return on investment could make them hesitant about taking this next step in exploiting the online channel in this way, and compounded their natural sense of risk aversion.

However alongside the question of whether to have a website or move into e-commerce was the use of social media to benefit the business. As already outlined this was a significant area for micro businesses particularly usage of Facebook, which was frequently being used as a substitute for a traditional website by many users.

IT support company with three staff based in the business owner's converted garage:

The business owner, in his mid-forties, had worked in IT and been made redundant 12 years ago when he started the business, which now employs three staff, and is based in urban Northern Ireland. The business focused on tech support and IT resale. The founder chose to be based at home to avoid overhead costs, and located much of the necessary technology in his converted garage.

The business owner was very technologically savvy and sophisticated. The company ran 'always on' servers which were monitoring their clients' servers and businesses. The owner aspired to be a company of 20-30 employees in the future, to spread geographically, and to tap into international markets such as the USA and Australia. However in the meantime his key concerns were keeping the business going, retaining existing clients, and keeping on top of their needs. The business had to be 100% responsive to client needs otherwise they would terminate their contracts. The business owner therefore worried a lot about ensuring their systems were robust, reliable, secure, and always remotely backed up.

Broadband reliability was of paramount importance:

The performance and reliability of broadband was absolutely essential to the business. The business owner therefore had two providers as a back-up in case one service experienced an outage. Mobile communications were also critical to the business with incoming calls being re-directed to mobile phones so they would always be accessible to clients. The business only had a landline as part of their broadband package, and used Cloud based services extensively, as well as 17 servers, to support their clients' needs. The business owner was 'cyber security obsessed' and put security at the core of their business practices. A final backup measure was an independent generator as an emergency power source to ensure the servers would keep running in the rare and unlikely event of a power cut. The nature of the business meant that they could never afford for their communications to fail.

> *"We do much less travel now as we can do lots remotely. We can do more fault finding in this way which makes a vital internet even more important".*

> *"The landline is only important because we need it for broadband".*

7.4. Usage of social media amongst micro businesses

Social media was being used by 55% of the sample of micro businesses and its usage for business was a significant theme throughout discussions. Facebook, Twitter and to an extent LinkedIn were the main social media sites, however Facebook dominated usage and thinking amongst the sample.

Facebook

Facebook was the preferred social media amongst micro businesses, with 54% of respondents in the sample using it. Many of those who were proactive users of Facebook for business purposes regarded it as on a par with having a website in terms of effectively projecting the business online. There were numerous cases of micro businesses using Facebook to frequently and periodically post content about their business, whether it be new lines of products, special deals, or simply using it as a way to sustain an ongoing relationship with customers. Some more advanced users of social media had started using Facebook for business services, which included free analysis, insights and statistics about their posts, and other content to help them refine their approach. Some of these users were also aware of further services that could be purchased via Facebook that would allow them to target on a demographic and geographic basis.

Twitter

Twitter seemed to be used less frequently by micro businesses with only 28% claiming to use it for business purposes. Unlike Facebook, Twitter had the drawback of not being able to post content and develop a 'page' that could in effect act as a proxy website. However despite this limited capability there were some examples of relatively savvy usage. For example one of the restaurants included in the sample used Twitter to keep in contact with suppliers of fresh produce. This allowed for quick and efficient ordering of seasonal and fresh produce that quickly came on and off the local market.

LinkedIn

LinkedIn was also used less than Facebook with 21% of micro businesses in the sample claiming to use it. The service was thought of more in terms of personal profiles and networking rather than for projecting the business via the online channel.

Social media, primarily Facebook, lent itself very well to the needs and preferences of micro businesses for the following reasons:

- Free to use – many saw a key advantage in the service being free, and therefore being able to use Facebook like a website, without having to pay a web developer or host. This attribute clearly appealed to the relatively frugal nature of micro business financing.

- Self-service – micro businesses liked the fact that social media was something they could use and manipulate themselves without necessarily having to rely on external help such as a web developer. Whilst older respondents tended to ask a younger colleague, friend or relative to help them learn to use such services, social media was relatively 'learnable' and many users were able to confidently use it themselves, particularly if they were also using it for personal use.

- Easy to use – social media was seen by users as something that was relatively easy to use. Most micro businesses using the likes of Facebook found posting content and interacting with users relatively straightforward and simple. Ease of use obviously underpinned micro businesses ability to self-serve in this area.

- Ability to project and push content to customers – one of the clear advantages that social media had over conventional static websites was the ability to push content to customers with whom they had links. This obviously required the customer to initially 'friend' or 'follow' the micro business, but after that initial step the business owner was able to reach out to customers on an ongoing basis. This allowed the micro business owner to be proactive, and have the ongoing ability to post new offers, products, events and so forth, as and when they happened.

- Enables a 'relationship' and interaction with customers - micro businesses placed a great deal of importance on each individual customer and, if relevant, could be very relationship focused. Using social media enabled them to foster relationships and keep them 'warmed up' on an ongoing basis.

- Able to use analytical services to refine their approach – more advanced users were able to use Facebook business services allowing them to refine their approach and maximise the impact of their posts. Much of the analysis was free, but business owners also had the potential to access paid-for services enabling more precise targeting.

"I think to keep going and to progress with the business we really need to keep looking at improving our Facebook page and making sure that we are using it to its full potential to attract customers and sell the business as best as we possibly can". (Hairdressing Salon, Urban Northern Ireland)

A tattoo parlour that had just started up with three employees:

The business (located in urban England) was set up six months prior to the research, having taken over from another parlour on the same site. The studio attracted customers and also other tattoo artists who were keen to work with the lead tattooist. There were three other tattoo artists who worked at the studio, and they along with the business owner were all in their late twenties and early thirties. They were all 'freelance' with the studio taking a cut of their fees. They saw themselves as a top studio which offered innovative and artistic designs. The main focus of the business was to keep growing their customer base, and to make sure they complied with all the 'red tape' and safety regulation

They felt they had relatively basic communications needs and wanted to keep it simple:

They felt that their communication needs were basic and they didn't see themselves as needing much communications equipment or expertise. They had a website that they never really used as it was seen as too complicated to maintain. The landline was seen as essential for taking bookings. They had Wi-Fi which they let clients use for free as some tattoos could take six to eight hours. People brought in iPads to keep themselves entertained whilst having a tattoo. Wi-Fi was also useful for Spotify and YouTube. All the artists used their own smartphones which were the main tool used for updating Facebook with photos of their work, taken with the camera on the phone.

Facebook played a central role in the business:

Facebook was their primary tool for projecting the business and engaging with customers. Tattooing was seen as a visual business. Artists' portfolios were constantly being added to, and needed an outlet to enable them to be easily shared and distributed. Facebook was seen as easy to update with new pictures, and every tattoo artist had admin rights. When they finished a tattoo they took a photo on their iPhone and uploaded it, so that each tattoo artist built up a digital portfolio. The Facebook page received lots of 'likes' and 'shares' and was a destination and inspiration to customers. Facebook was used to communicate as well as advertise. Most clients sent messages to the Facebook page, rather than by email, and the studio then continued the dialogue until they made a final phone call to confirm the booking.

> *"Facebook is massive for us. I get four friend requests a day and people are always 'liking' the work".*

> *"For us, Facebook is perfect. It shows off the tattoos and allows us to talk to our customers".*

Hairdresser and nail bar used landline and social media to engage customers:

The owner, in her late forties, started by renting a chair in a salon from a previous owner and then bought the business (located in urban Northern Ireland) when they retired. She was cautiously confident about the business and always thinking of new ways to engage with customers.

Landline and social media via smartphones and tablets were the main communication tools:

The business straddled the digital and non-digital worlds. Customer records and appointments were still manual rather than electronic. The landline was critical for customers to make appointments and to operate the card machine. They had made a conscious decision not to invest in broadband as they felt that it was not necessary given their ability to use 3G and mobile internet via their smartphone and tablet. However there was some feeling that it would be good to be able to access fixed broadband as a backup.

Smartphones and the iPad were therefore key technologies for the business. Younger colleagues helped the business owner run the salon's Facebook page through their personal smartphones, posting regular offers and texting customers regarding appointments. They also used Snapchat, Instagram and Twitter to post images of different hairstyles and new products, and push those out to existing customers.

Having a website was low on their agenda as their needs were being met by Facebook and other social media. The business also used a salon product manufacturer's website which their customers could access, and the salon would receive a commission on sales as a result. All of the salon's administration work was done from home on a tablet.

A loss of the landline had caused real problems, with little compensation from the provider:

Their landline had gone down previously and they were without a card machine for over a week. They were offered £5.34 in compensation, which they considered derisory. The experience made the business owner want to leave the provider and cancel the contract, but they could not afford to pay the £150 fee to do so, so they were 'sitting it out'. They had been very frustrated by the experience and felt that more compensation should be due to the business. However they felt that, as a small company, they had very little leverage with the provider.

"You've got a small window to contact a customer through Facebook so it's (3G) got to be reliable".

"When the phone line went down, people thought we'd closed, and we lost some business".

7.5. Usage by service – Mobile

Overall

Mobile phones were regarded as critical to micro businesses and well suited to their needs. As a mobile technology they enabled micro businesses to overcome their particular capacity constraints, offering business owners the flexibility to be reached wherever they are, whether on the road, on site, or simply away from their core business premises. Mobiles, particularly smartphones, were therefore an ideal tool for micro businesses and the research indicated that they would remain a central part of their communications setup.

Some micro businesses, in particular sole traders, were running the whole business with a smartphone, using a combination of voice and email to cover much of their needs. There was some desire amongst these businesses to substitute mobile for the fixed line but this was tempered by awareness that prospective customers could be reluctant to initially contact a business that did not display a fixed line number.

Micro businesses were relatively more confident in making choices in this area and out of all the communications services mobile was an area where they tended to operate more as a consumer than as a business. Micro businesses felt relatively more confident making choices between different packages at least in terms of texts and minutes, although less so in terms of data. In addition many micro business owners simply used their personal mobiles for business purposes, and relied on their employees using their own personal mobiles. In their view minute and text packages were generous enough to allow for business usage to be accommodated relatively easily, and the data requirements for micro businesses via their mobiles were relatively low.

> *"We obviously have the landline for phone calls but we also have the mobile where we can have access to our Facebook account and also for texting our clients".* (Hairdressing Salon, Urban Northern Ireland)

> *"The mobile phones are very important for us. It is not so much being on call, but if there is a problem with anything then I need to know within seconds or minutes of there being a problem because otherwise websites disappear, peoples' email stops working, and that becomes an issue".*
> (IT support company, Urban England)

> *"This phone is my computer, phone and camera all rolled into one – I don't need anything else".* (Painter and Decorator, Suburban Wales)

Figure 15 below shows the broad split between smartphones and non-smartphones for mobile services – as well as the key reasons both are used in business.

Figure 15: Mobile phone usage by device

Mobile phones: Usage of different devices and key benefits

Use of Smartphone and/or non-smartphone?	Payment method

Benefits of mobiles for the business

%

Smartphones — 90
- Contract: 98%
- PAYG: 5%

Non-smartphones — 25
- Contract: 63%
- PAYG: 42%

% Benefits of mobiles for the business:
- Accessible out of office — 61
- Contactable 24/7 — 33
- Access to email — 8
- Access to Internet — 5
- Can get rid of PC — 3
- Can get rid of Internet — 3
- Access to apps — 2
- Don't know — 7

NB: Pre-task interviews
Base size: <115

NB: Semi-structured interviews
Base size: <75

Semi Structured Q31 How would you describe the benefits of mobile phones for the business? Base: All answering semi-structured n=61
Pre-task M1 Which of the devices on the list below do you have? M2 How do you pay for your smartphones/standard mobiles?
Base: All answering n=103/82/19

Overall, 98% of the micro businesses in the sample were using mobile phones. Within the sample mobile phone usage had therefore overtaken fixed line usage amongst micro businesses.

The benefits stated provide an understanding of why this is. It seems that the mobile phone enabled micro businesses to be more accessible, whether it was when they are out of the office (mentioned by the majority of respondents) or out of office hours. Again, mobile technology may be an important tool in enabling micro businesses to overcome their capacity constraints and relatively thin resources. Figure 16 sheds more light on how mobile phones were used.

Figure 16: Mobile usage

Mobile usage: how used in general, smartphone specific usage, location and spend

Main things use mobiles for

%

Receiving calls: customers	78
Calling customers	75
Calling suppliers	61
Receiving calls: suppliers	57
Receiving calls: other people	57
Calling other people/organisations	50
Receiving calls: staff out of office	45
Calling staff who are out of office	45

Main things smartphones are used for (other than making calls)

%

Email	83
SMS	65
WiFi	60
Social Media	47
Connecting to internet	41
Other apps	29
Travel related apps	25
Other	18

Approximate spend past 12 months

%

14	15	10	44	16

■ >£1600   ■ £751-1600   ■ £501-750   ■ £200-500   ■ <£200

Where mobile phones used

% When travelling	82
Home	75
In own office	58
Customer's location	48
Other	8

Pre-task M7: What are the main things you use your mobile telephones for? M8 Other than making calls what are the main things you use your Smartphones for? M8 Where do you (and people in company) generally use mobile phones? Base: All answering where service is applicable n=92/92/91

NB: Pre-task interviews Base size: <115

Contact with customers was the main type of voice communication for which mobile phones were used, whether it was receiving or making calls (mentioned by 78% and 75% of the sample respectively).

Outside of 'voice', smartphones were most frequently used for email, with 83% of respondents who used a smartphone claiming they used this feature. It was also interesting to note that although the most prevalent location for phone usage was 'when travelling' it was also used a great deal in fixed or 'base' locations, such as home or office.

"These smartphones now are all controlled from the office. So our emails are linked to a server at the other office which this is connected to as well, so we have got a direct link between the two premises, and then when appointments come in they are put into the calendars, which then goes out to the phones. So it will come to my phone and the fitter's phone. So he has his appointments and all the information he needs". (Kitchen Fitter, Suburban England)

> **Painter and decorator working in a suburban area who used his smartphone for everything:**
>
> The sole trader (located in urban England) was in his early thirties and had worked for various people in the past in decorating and maintenance. After being made redundant he started doing odd jobs and had gradually built up a local reputation. He wanted to get a few more private customers, but also wanted to sub-contract himself to larger building companies, but his main ambition was to keep earning a living rather than growing into a bigger business. He was hoping that work would pick up in the future, and that the recession had done its worst. It was critical to him that he did a good job and that he exploited and encouraged word of mouth amongst his customers. He didn't advertise but rather simply relied on his number being passed on by existing customers.
>
> The smartphone was the vital communications tool for his business. He didn't use a fixed line phone at all for business. He had a desktop at home but only used it for writing quotes and invoices which he normally emailed. However his smartphone went with him everywhere. With his smartphone he could answer a call from a customer wherever he was, 24/7. Coverage could be difficult sometimes and was seen as a minor frustration and irritant, but in his view that was expected when using a mobile phone.
>
> > *"This phone is my computer, phone and camera all rolled into one – I don't need anything else".*

7.6. Usage by service – Mobile internet

Overall

Discussions surrounding mobile internet were often in combination with discussions on mobile in general and differentiation between the two services could often be blurred in respondents' minds. The main use of mobile internet was around emailing and data usage via smartphones. Usage of mobile internet via laptops or tablets was very limited and tended to be used off wireless networks at business premises or at home, as opposed to services that may be found in cafes or other public areas. However the potential of accessing work systems, or being able to do more work tasks, whilst away from the office or home using mobile internet, was very appealing. Micro businesses saw mobile internet as having greater potential to enable them to stretch their working capacity and operate more flexibly.

The research indicated that mobile internet may still be an emerging area for micro businesses particularly in terms of harnessing its potential via devices other than a smartphone.

> *"Then of course we have the iPad which gives us greater access to our Facebook account. We can also browse and search for new products, new ideas, what is happening out in the market, and then also download. It is a bit easier to be working from the larger screen than it is the phone but the phone is a great backup".*
> (Hairdresser Salon, Urban Northern Ireland)

> *"We have a programme that we can download. We can go along to somebody's house, let's take for example a kitchen, and with the iPad apps that we have, we can take a photograph of your kitchen and we can interchange all the colours, which is a really useful app to have".*
> (Kitchen worktop manufacturer, Suburban England)

Figure 17: Overall usage statistics for mobile internet services.

Mobile internet usage: type of connection, access method, spend and applications used

Type of connection used

| Residential/ consumer grade 69% | Business grade 21% | DK 10% |

Approximate spend past 12 months

% | 7 | 33 | 28 | 59 |

■ >£1600 ■ £751-1600 ■ £501-750 ■ £200-500 ■ <£200

How access Mobile Broadband?

%	
Mobile wireless...	69
Wi-Fi hotspots in café etc	48
Dongle/USB drive	38
Tethering	34

Internet applications used via Mobile Broadband

%	
Email	97
Company website	42
Online banking	39
Ordering goods/services...	36
WiFi	33
Paying via BACS	33
Social media	29
Instant messaging	27
Sharing media content	21
Company intranet	15
Work-related apps	15
Sites for uploading files	15
VPN/remote login	9
Cloud data storage/back up	9
Merchant online payments	9
Online retail/sales packages	9
VoIP	6
Marketing applications	6
Syncing documents	6

Pre-task IM5 Do you use a business grade connection for your mobile broadband service or is it a residential service? Q7 Which of the following do you use to access mobile broadband? IM6 Which if any of the following Internet applications does your company use when using mobile broadband? IL1 How vital is mobile broadband to your business? Base: all answering n=29/29/33

NB: Pre-task interviews Base size: <115

As can be seen, most respondents in the sample were using residential grade services. As expected, spend was relatively low, with the majority of respondents spending less than £200 per year. A variety of access methods were used, with mobile wireless hotspots/mi-fi being the most frequently mentioned. The most widely used application was email, which was used by almost all respondents.

7.7. Realising the business benefits of communications

A minority of the sample clearly demonstrated the potential of communications services and technology in achieving business success. These businesses tended to be within the more proactive segment. In particular early adoption or relatively sophisticated usage had enabled such micro businesses to 'punch above their weight' in business terms, such as kick starting the business in the first place, significantly expanding the reach of the business, or putting themselves well ahead of the competition.

These 'success stories' highlighted the potential for micro businesses to realise significant and tangible business benefits and achieve greater prosperity and growth as a result of communications adoption and usage.

Some examples of such positive impacts included the following:

- Kick starting the business – a sole trader had started a catering business from her home and had used Facebook to help successfully establish and market the business and reach out to increasing numbers of customers.

- Getting ahead of the competition – a local taxi company was the first company in the area to launch its own website. This has led to the company rapidly outstripping the competition and even receiving international bookings from clients travelling to the UK from the USA.

- Increasing the number of client queries – a carpenter had set up a basic website that was primarily used to display their work and projects they had completed. Again this was relatively rare amongst the respondent's competitive set, and had helped to generate much more interest and enquiries from prospective customers.

- Doubling turnover – a hotel began using online travel booking sites, and since doing so had doubled its turnover. The benefits of using these services had been so significant that the business owner had decided to contract a 3rd party adviser to look at their communications more widely, and identify any further opportunities for commercial exploitation.

- Expanding the reach of the business – a cleaning company had purchased four geographic numbers via iCloud services which all diverted to the business owner's mobile phone. This enabled them to present a significantly larger geographic footprint to prospective customers and begin to bring in business from a much wider catchment area than previously. Geographic numbers also gave the business an appearance of tangibility that helped underpin its credibility in the market. In their view prospective customers preferred a cleaning company that was local to them, and would not consider a company that only provided a mobile number to call. Using iCloud numbers in this way enabled them to compete with larger regional competitors.

- Transacting globally – an export company exported 70% of its stock to a range of African nations including Nigeria. All of its dealings with Nigerian customers were done via WhatsApp which was thought to be very popular in that market and was regarded by the business owner as easy to use for business purposes. In addition this method of communication offered a very low cost means of communicating internationally, which was particularly appealing to the frugal nature of the micro business in question.

More generally, figure 18 looks at two aspects of how a change to communications has affected the business. The chart on the left displays the perceived impact of the changes people have made. As can be seen over half had experienced a positive impact on their business.

When looking in more detail at how improving communications had explicitly benefited the business (the chart on the right), the majority of respondents were able to cite at least one benefit; with increased speed of action, ability to reach more customers and improved efficiency mentioned most frequently. It is of interest that a number of respondents did not identify a benefit from changing their communications. This was driven by the fact that some respondents mentioned that the change was simply a 'like for like' replacement – with little expectation of further impact or benefits.

Figure 18: Benefits experienced since changing communications
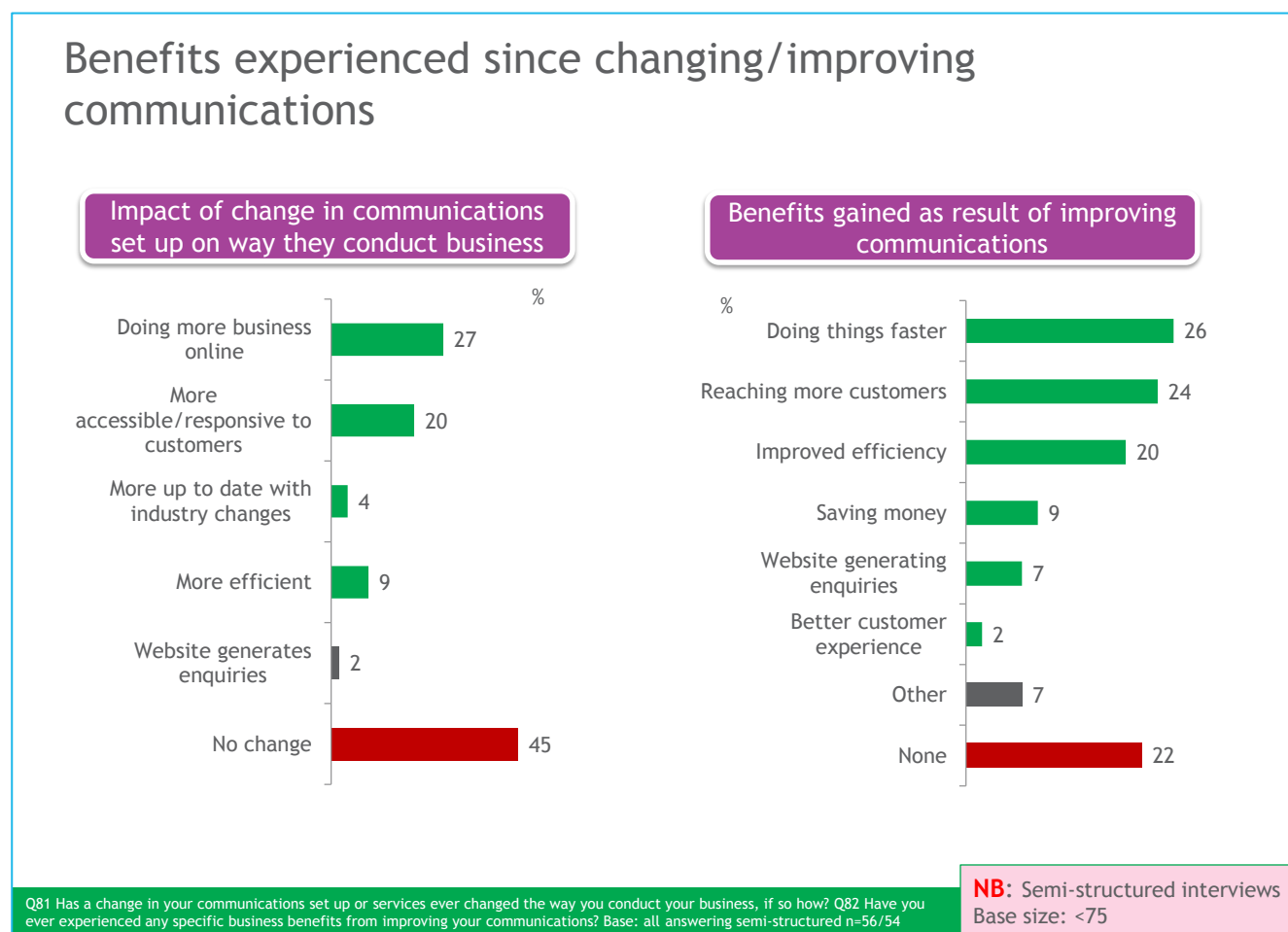
7.8. What micro businesses value in their communications

Across the sample a consistent set of attributes emerged that defined what micro businesses valued the most with respect to their communications services and technology.

These attributes included the following:

- Reliability – first and foremost micro businesses placed great importance on the attribute of reliability. The need for a reliable and stable service was their main priority. This was primarily mentioned with regards to the internet, but also included mobile phone coverage. Micro businesses wanted to ensure that such essential services were consistently available when needed with minimal disruption.

- Performance - related to reliability was the value of performance. This was particularly with respect to fixed internet and mobile internet where micro businesses wanted their services to perform consistently and to the standards promised by the providers. This also extended to a desire amongst businesses to see the continued roll out and improved access to superfast broadband, and 3G and 4G networks.

- Flexibility and mobility – micro business owners were often keen to use technology to enable them to access their business and work 'anytime and anywhere', for example via devices such as smartphones or tablets. This was of particular value for micro businesses in enabling them to overcome their lack of internal resources and capacity constraints.

An additional element of flexibility that micro businesses valued was being able to easily scale up, and scale down communications usage. This was both in terms of contractual flexibility and technical flexibility. Some micro businesses had the potential to rapidly change size, either shrinking due to economic pressures, or rapidly growing as business picked up. In these types of situation business owners were particularly keen to be able flex things like mobile phone contracts, and to add and subtract services without undue cost or penalty, in order to keep pace with the needs of the business.

In addition, being able to quickly expand the capacity of their communications setup was also valued. Those using VoIP found the ability to be able to easily and quickly add new lines particularly appealing in this respect.

- Simplicity – business owners were keen to avoid overcomplicating communications services and technology. This attribute applied across keeping the setup of their communications simple, through to being able to understand provider information more easily in order to compare across different packages, and being able to adapt and use communications, by themselves. The desire to keep it simple could also extend into using bundled services for some, whereby they had only one provider to deal with for a range of services.

- Self-service and easy to use – related to the above attribute, micro businesses were drawn towards solutions that they could implement, use and develop themselves, particularly in light of the fact that many were unable to contract 3rd party support in this area, and therefore had to be relatively self-reliant. This underpinned the appeal of using tools like Facebook to project the business online, and for many businesses Facebook became their de facto website, as opposed to relying on a developer to create and technically support a site.

- Integrated – there was some desire across the sample for greater integration between services and devices in order to access work systems via any device. Being able to access work systems via laptop or tablet for example allowed the greater flexibility that micro businesses were often looking for.

- Enabling direct interaction with the customer – as already outlined there was a strong desire to contact and connect directly with customers amongst micro businesses, who could be very relationship focused in their approach. This desire generated favourability towards technology that allowed this kind of contact and interaction, and explains the primacy of voice in their thinking, and the appeal of tools such as social media.

8. Adoption of communications

8.1. Planning and budgeting for communications

As is often the case with wider business planning, micro businesses approach to planning their communications was often improvised, with their communications evolving and developing as the emerging business took shape. A minority of businesses had to take a more deliberate and planned approach, for example those businesses that were providing IT and technical support to other business. However the majority did not have such a planned approach and over 80% had no specific communications budget. Micro businesses therefore rarely overtly planned or budgeted for the communications services and technology that they adopted and used.

8.2. Factors driving adoption

The research revealed a range of factors that influenced adoption of communications services and technology. These factors could work as either drivers or barriers depending upon the individual situation and business context combined with the characteristics of the micro business owner themselves. These factors, and how they played a role as adoption drivers or barriers, are summarised in figure 19 below:

Figure 19: Factors influencing adoption

Factor	As a driver	As a barrier
Customer demand	Many simply do what is necessary to reach and engage with their customer. If customer needs change, they will try and adapt	This can underpin a 'good enough' stance. If customer is not demanding a change then the business is not prompted to develop area or be proactive
Competitor orientation	Many conscious they cannot afford to 'fall behind' and will follow competitors	Again can underpin 'good enough' stance, and 'follower' mind-set can be barrier to developing more innovative approach
Finance	In some instances having some capital available has prompted thoughts of investing in communications. Particularly areas like starting a website or making it transactional	Running costs are rarely high enough to drive a need to change communications providers or set up. Many are cash poor or lack investment capital. If do have capital available tend to prioritise other investments such as a new tool/transport etc
Efficiency	Strong desire to make working lives and processes easier. Can drive a particular interest in mobile technology/devices	However challenge of finding the time and understanding how to use communications technology to realise a more efficient way of working
Generational	Younger respondents were more 'digitally aware' and tended to be more confident in deliberately exploiting communications, particularly online	Older respondents did admit their own lack of knowledge with technology. They could be less confident in this area and this would hold them back from using comms
Personal enthusiasm and experience	Personal enthusiasm for technology and degree of personal exposure could be mean person is more knowledgeable and confident in making choices	Approach can be confined by personal experience and limited to what they have used as consumers
Skills and knowledge	Related to generational and personal enthusiasm if the person has some skills and knowledge in this area can apply these to this aspect of the business	A lack of skills and knowledge could act as a significant break on developing communications particularly in the absence of external support/3rd party advice
Planning culture	The more 'planned' in approach to business could also include more planned approach to purposively using communications as tool for business development and growth	Many did not have a business plan and business had evolved over time with approach typically improvised and emergent. Approach to communications reflected this lack of planning culture

A pub hotel with an evolving approach to adopting and using technology:

The business owner in his mid-fifties used to be a customer of the pub and the opportunity arose to enable him to buy the business (located in urban Northern Ireland). He also owned a small dry cleaning business and was consequently stretched across two very different businesses. He considered himself as relatively low tech personally, but was conscious that he needed to understand more about how he could use technology in their business.

Contracted the services of a computer student to help modernise their communications:

He 'employed' a computer student to help design and build a website. He hoped to make the website transactional for booking rooms. In addition he had just acquired an iPad. One of the features he particularly liked about having the iPad was the ability to control their security cameras via an App on the device. In addition the business owner was having a new computer installed so that he could move email, invoicing and ordering, as well as record storage onto the device. At the time of the research everything was kept on paper records.

Reliant on their smartphone and tablet to cover most of their needs:

Most of his communication was done via his smartphone and tablet, with emails all done on the iPad. He had two broadband providers. One deal included Wi-Fi and a TV package primarily for customers and guests, whilst he had separate broadband for his own use and to provide a 'secure' line for remote access to CCTV and business email. He didn't want customers using the same Wi-Fi.

8.3. The influence of business life stage on adoption

Business life stage i.e. whether the business was a start-up or a more mature business, and whether it was seeking to grow or simply sustain itself, also played a role in influencing adoption.

For those businesses starting out

For start-ups or recently established businesses in their first year or so, there could be a strong desire to 'do things properly' in getting the business kick started and off to a strong beginning. Businesses during this life stage at least had the potential to be more proactive in their approach to communications. There were also some examples of start-up businesses where communications had played a powerful role in enabling the business to launch from scratch. Amongst these fledgling businesses there was also greater potential for the business owner to tap into small business advice networks that could include communications related advice. This included organisations like the Federation of Small Businesses, Business Gateway, Business Link (when it existed) and other events or forums hosted by local authorities or chambers of commerce. If the business owner did use these sources of information and advice it tended to be general business start-up advice. However using and exploiting communications could form part of the advice package, and some businesses had attended events and sessions that were solely focused on topics like how to set up your own webpage.

Despite some evidence of business owners using such sources of advice, information and guidance, they also typically faced the challenge of being intensely busy during the start-up phase of the business. In addition they could be more drawn towards using residential services initially, particularly if they were starting up as a sole trader or operating from their home. However at the same time one of the advantages of being a start-up in this context was the absence of any legacy systems holding them back, and impairing their ability to change their communications.

For more mature businesses going for growth

With more established businesses that demonstrated a level of business ambition and desire to grow, these businesses could be more planned and purposeful in their approach to the business in general, and tended to be relatively proactive with their communications. This generally more planned approach to the business could also mean that communications had a more integral and deliberate role in helping the company achieve growth. This was particularly the case when it came to using the online channel to project the business and reach out to more customers, whether by building a website from scratch, converting an existing website into a transactional site, or using online re-sellers, search engine optimisers, or social media to market through the online channel. Amongst these more ambitious and generally more planned businesses there could be a particular interest in being able to easily 'scale up' communications as the company grew and took on more staff.

For more mature businesses ticking over or in a steady state

A proportion of more established businesses were less overtly ambitious and did not exhibit a strong desire to grow. These businesses could be more passive or reactive in their approach to communications. They were generally more interested in sustaining the business they had, and making sure it continued to bring in a steady amount of revenue. For these businesses the need was for their communications to be just 'good enough,' and they could demonstrate an 'if it isn't broken, don't fix it' pragmatic stance towards this area. These businesses were likely to carry on a 'business as usual' approach unless forced to change by a shift in customer demand or markedly more intense competition. They were less inclined to proactively explore the potential of communications and could be slow to change as long as their current arrangements were good enough to support the ongoing status quo.

For those businesses in decline or downsizing

A small proportion of the sample had unfortunately experienced a decline in business (sometimes a sharp one). None of the businesses which experienced such difficulties were deliberately downsizing, but instead had been forced to by a drop in demand or more intense competition. In some cases this had been a very rapid and sudden drop, for example when the business was dependent upon a single contract with a given organisation, or was a supplier to the public sector when cuts were being made. For these businesses there was a need for

providers to offer a degree of flexibility in allowing the business owner to scale down or terminate contracts without excessive penalties.

Although there were very few examples, some businesses had been forced to pay what they regarded as excessive termination penalties just at a time when their business was really struggling financially. In addition these incidents also absorbed considerable amounts of time and energy through trying to negotiate better terms and avoid undue costs, during what was inevitably a very challenging and difficult time in the life of the business.

8.4. The influence of company size on adoption

Company size was also an influence on the adoption and organisation of communications services and technology within a given business. Different size bands resulted in different approaches to communications in terms of the following:

Sole trader/small (0 – 2 employees)

Businesses of this size were more likely to work from home using residential services, particularly sole traders. They were also more likely to have an exclusively consumer or residential mind set when considering, procuring and managing their communications services, and they were more likely to have a relatively simple approach to their communications setup.

Medium sized (3 - 5 employees)

When a business was more medium sized there was greater potential to be located on formal business premises and therefore have business grade services for things like fixed line and internet. In addition having more staff to manage potentially meant having to set up a network of computers or devices to link all staff together, although this was not always the case. For some businesses all that was required was for the member of staff to have a smartphone which was often their own personal phone, rather than a business phone as such.

Larger sized (6-9 employees)

Larger sized companies were likely to have formal business premises, use business grade services, and had at least in theory greater potential to have a member of staff responsible for administration, and who could potentially be made responsible for communications.

Amongst these larger micro businesses there was a need to share and network communications more amongst staff members and employees internally. In addition some of these larger micro businesses were previously SMEs which had shrunk as a result of the recession and become a micro business by default. These companies tended to retain a more professionally organised and planned approach to their communications, which they had developed when they were larger companies.

9. Issues and challenges with communications

9.1. Key issue #1 Reliability and performance of communications

Fundamentally micro businesses needed their communications services to be switched on and to perform to the required standard. For many businesses the quality of the technical service and the reliability of the underlying communications infrastructure was their primary concern.

> *"The impact is like walking on one leg. If you haven't got one of the things you need, it is fine being able to cook food and having all the staff standing there paid to do it, but if you can't get orders through because people can't phone to book a table or can't order online or can't do whatever they are doing, then you are not going to get any business in, so you need everything to happen".* (Restaurant, Urban England)

These infrastructural issues were broken down and prioritised in terms of the following:

Reliability and performance of fixed internet services

A loss of internet service or slow internet speeds could be a major source of frustration for micro businesses. In some cases these issues could significantly impair the business from functioning day to day.

A loss of internet service entirely could happen for a number of reasons whether due to a fault on the line, engineering works, switching between providers, or due to events like severe weather. When there was no internet service the impact on the business was severe and detrimental. Being without the fixed line telephone could be compensated for by using mobile phones but there was little way of working around being without fixed internet. Being without internet services would be severely disruptive to businesses of all sizes but micro businesses could feel the impact more severely due to their small size and relative fragility. They were simply less able to absorb and work around the loss of business that could result from such disruption.

Slow internet speeds were often an issue in rural areas. However other locations had also experienced such problems. Depending upon the severity, slow internet speeds could hamper a business's ability to function. Many businesses depended upon the internet for all sorts of functions whether these be emailing, having a website, using social media, using other internet based applications, or running various business process via the internet, and even doing things as relatively basic as downloading software in order to install a new printer. All of these functions could be impaired by poor internet speeds. In light of these issues micro businesses questioned the credibility of provider claims about internet speeds when presenting their internet packages. In addition many were keen to see the roll out of faster broadband as quickly as possible.

> *"The problems that we have here with the internet is that sometimes the signal is poor and it can vary in different areas of the house and so wanting to use my laptop in the kitchen compared to using it in the lounge, the signal changes and sometimes you are halfway through doing some work and it cuts out, or you are trying to send emails and it is cutting out, and that is very frustrating".*
> (Equestrian Centre, Rural Wales)

> *"We have had issues with it going down and not working and having to come and reset the router and stuff like that, quite a lot actually to be honest".*
> (Restaurant, Urban England)

> *"If we are not receiving leads that has an impact. If we are unable to communicate with our clients, because we can't receive emails, which just messes everything up".*
> (Kitchen Worktop Manufacturer, Suburban England)

Figure 20 below shows both ongoing day-to-day issues that respondents mention in relation to broadband and specific problems that they've experienced. The main ongoing issues mentioned related to speed, both in terms of their current speed (just under one quarter of respondents claimed it was too slow) and their inability to get fibre/superfast.

When thinking of specific problems, reliability was a key issue. One in five of the sample reported that they had experienced short periods where the service had been down – and a smaller number reported longer outages. (It should be noted however, that this question was not 'time period' specific e.g. in the last 12 months).

Customer service was mentioned by approximately 1 in 10 both as an ongoing issue and in relation to specific problems (in regards to poor speed of resolution).

Figure 20: Issues and problems with fixed broadband

Issues and problems with fixed Broadband

General 'day to day' issues with broadband

Main problems experienced

23% too slow

20% service down short period

13% poor customer service

14% service down longer period

11% unreliable

12% server problem

8% can't get superfast

10% said speed of resolution poor

8% router problems

Semi-structured Q46 How would you describe the benefits of BB for the business? Q47 Do you have any issues with your fixed Broadband? Base: All answering semi-structured n=53

Q58 Has the service ever gone wrong? What happened? Base: All semi-structured n=51

NB: Semi-structured interviews Base size: <75

"We rely heavily on the website which in turn relies heavily on our server and broadband connection and then from that people will email and phone us, and without that, that is our main source of work, so if broadband goes down I stress".
(Appliance Company, Urban England)

"The relationship with my customers with regards to Wi-Fi, we have a stable Wi-Fi and then it goes down for two to three days and literally people are looking at you like you have cut their arm off. How can you, where is my Wi-Fi? You have to have the reliability".
(Restaurant, Urban England)

Mobile phone coverage

Mobile phone coverage could be highly variable and poor in some areas. Again rural locations were the worst affected by poor network coverage but this issue could also be found in urban areas that experienced coverage black spots. Mobile coverage issues could occur on two levels, when the user was calling from their own premises, and when the user was out and about and moving around.

Businesses in rural locations suffered the most when calling from their own premises. For many of the rural businesses the reliability and quality of coverage was an ongoing issue. A common experience amongst such businesses was only being able to make and receive calls in certain parts of their business premises. This meant that they were forced to make calls in what were sometimes inconvenient locations, or were unreachable for periods of time, unless they happened to be in the right spot where they could get a signal. However these issues were not restricted to rural locations. Other areas could also experience poor coverage. Some businesses who had experienced coverage issues on an ongoing basis around their premises had obtained signal boosters to try and compensate. These had some, albeit limited, impact on the strength of the signal.

Poor mobile phone coverage could also be an issue when out and about and on the move. This tended to be more of an irritant to micro businesses, as opposed to an ongoing issue when it was related to their business premises. Nevertheless micro business owners, particularly smaller companies or sole traders, were conscious that they always had to be contactable no matter where they were, and that they were unable to rely on having staff manning phones back at an office or premises.

Again similar to comments made about provider claims with respect to internet speeds, micro businesses could question the reliability of provider claims with respect to the quality of network coverage.

Figure 21 below shows both ongoing day-to-day issues that respondents mentioned in relation to mobile phone services and specific problems that they had experienced. It is very clear from this chart that both the dominant ongoing issues and more specific service problems experienced, involved coverage.

Coverage seems to be a greater ongoing issue for rural businesses with one half of rural based respondents mentioning it, compared to the average of around one third (caution – low base size, this is an indication rather than a statistical estimate).

Figure 21: Issues and problems with mobile phone service

Issues and problems with Mobile phone service

General 'day to day' issues with mobile phones

Main problems experienced

32% coverage issues (mostly minor)

27% coverage/ reception issues

8% contract issues

5% phone breakage

8% phone operating or battery

5% cost

Semi-structured Q32Do you have any issues with your mobile phones? Base: All answering semi-structured n=61/63

Q43 Has the service ever gone wrong? What happened? Base: All semi-structured n=63

NB: Semi-structured interviews Base size: <75

Figure 22, highlights the actual levels of coverage micro businesses estimated that they received and their satisfaction with it. Overall, 78% of businesses sampled were satisfied with the coverage they received, and 14% were actively dissatisfied with it. Interestingly, there was little difference seen between many rural businesses and urban firms, suggesting that even in cities, the presence of coverage 'black-spots' may be impacting on businesses.

In terms of coverage received, 29% of the sample stated that they got coverage less than 80% of the time. This relatively low level of coverage would suggest that respondents were less satisfied with coverage than they appeared to be in their overall satisfaction. In addition the qualitative interviews suggested that respondents believed that poor coverage was simply a 'fact of life' for their network or mobile phones in general in that location, and unless they changed location they had to resign themselves to the issue.

It may be, therefore, that expectations of coverage have been lowered by hitherto poor performance, thereby resulting in higher than expected satisfaction scores.

Figure 22: Satisfaction with coverage

Satisfaction with coverage and level of coverage received

Satisfaction with coverage

How describe mobile coverage in area

	%
25	53	7	10	4

- ■ Very satisfied
- ■ Fairly satisfied
- ■ Neither
- ■ Fairly dissatisfied
- ■ Very dissatisfied

	%
20	51	18	3	8

- ■ Can always get coverage
- ■ 81-95% of time
- ■ 51%-80% of time
- ■ 31-50% of time
- ■ Rarely (0-30% of time)

Pre-task M12 Thinking about coverage how satisfied or dissatisfied are you? All answering n=991
M8 Thinking about the mobile phone coverage in your area, how would you describe it?

NB: Pre-task interviews
Base size: <115

"So I need to be somewhere that I have got phone signal on my phone and it is a kind of worry that if I have not got signal a panic sets in because I know if there is a problem and there is no one there going to deal with it".
(IT Support Company, Urban Northern Ireland)

"My mobile phone can be very frustrating in that the signal is poor and even in different areas of the house. I have to lean right into the window and somehow I get a signal there and my texts come through and people can phone me as long as I am hanging in the window. Sitting in the kitchen or even in the bedroom and I can't use it and can't pick up signal at all. I can go across to the car park, I have signal in the car park. I can go across to my indoor arena and I have signal there, but yet down in the yard I have no signal".
(Equestrian Centre, Rural Wales)

"I get signal pretty much upstairs. Down here I get it by the bar, in the window, in the hallway and outside, so it is very good. I think it helps because we are so high up here". (Pub, Rural Wales)
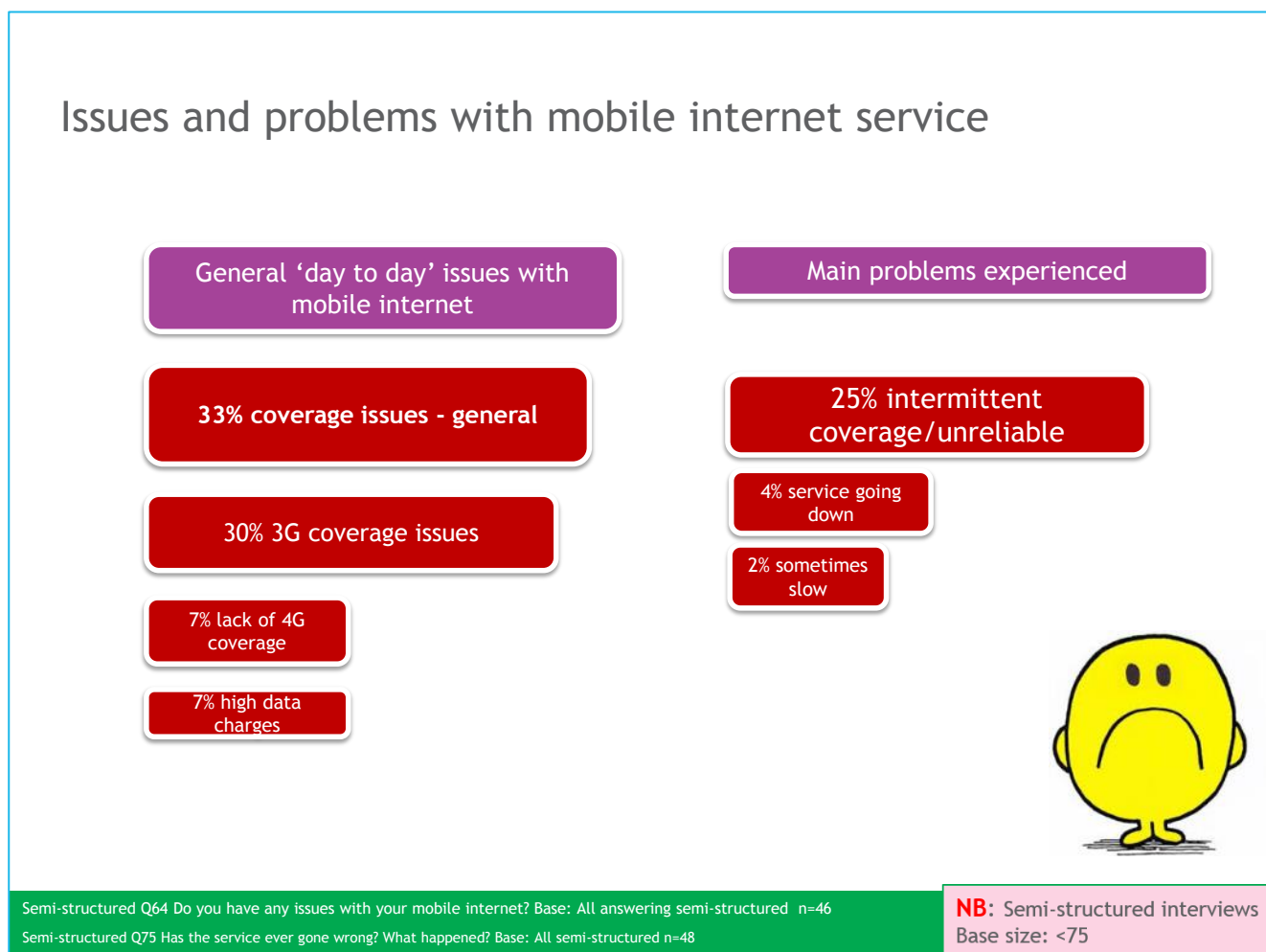
Variable 3G and 4G coverage

Mobile internet was a relatively emergent area for micro businesses which were using the service primarily via their smartphones, but also tablets and sometimes laptops. For some businesses having access to mobile internet could be used as a backup internet service if the fixed line internet service went down or was disrupted. For other businesses who were heavy users of their smartphones, mobile internet was a vital means of sending and receiving emails as well as general use of the internet. Many micro businesses expressed an interest in being able to use larger mobile devices such as laptops, but more importantly tablets, as they potentially provided the optimum balance of mobility and functionality that was particularly appealing to this size of business.

> *"If we hit one of those times when it is not easy to get the access through your 3G, you know, and it is very slow and you really don't have that time. I mean you have only got a small window to contact your customers again through Facebook".*
> (Hairdresser Salon, Urban Northern Ireland)

Figure 23 highlights the issues and problems businesses reported in regards to mobile internet. As can be seen, many reported coverage as an issue either in general, or specifically in regards to lack of 3G coverage.

A minority also complained of lack of 4G coverage. Although the research cannot say whether a lack of 3G or 4G was hampering take up of mobile internet, it can say that perceived problems with 3G and 4G coverage were impacting on usage and satisfaction with this service.

Figure 23: Issues and problems with mobile internet

Issues and problems with mobile internet service

General 'day to day' issues with mobile internet

Main problems experienced

33% coverage issues - general

25% intermittent coverage/unreliable

30% 3G coverage issues

4% service going down

7% lack of 4G coverage

2% sometimes slow

7% high data charges

Semi-structured Q64 Do you have any issues with your mobile internet? Base: All answering semi-structured n=46
Semi-structured Q75 Has the service ever gone wrong? What happened? Base: All semi-structured n=48

NB: Semi-structured interviews Base size: <75

Customer service and provider response to disruption

Customer service was a topic that was raised primarily in terms of how providers responded when the technical service went wrong or was disrupted. Such situations were regarded as the ultimate test of a provider's customer service ethos and standards. As already outlined service disruption or loss of fixed line and internet services, for whatever reason, could be severely disruptive to a given business. The impact of service disruption could be compounded by the provider's response in terms of the following:

- If the business was reliant on residential services – reliance on residential services meant that the micro business could potentially experience residential service levels in dealing with service faults. Whilst this may be relatively acceptable from a residential perspective, it was less tolerable from a business perspective and represented a key area of risk for micro businesses.

- Not knowing how long it would take to fix a given fault - an area of anxiety and stress for micro businesses was when the service was disrupted and they did not know how long it would take to fix the fault. In such instances micro businesses were unable to know whether or not they needed to initiate alternative measures or wait until the fault has been resolved.

- Being caught between different providers responsible for network infrastructure versus the service itself – if a service fault occurred, respondents often had to go through a diagnosis process that tried to work out whether it was something wrong with their computer, the modem, the internet service, or the line itself. This could result in the micro business feeling caught between their internet service provider and the provider responsible for the infrastructure, with neither provider taking responsibility nor ownership of the issue. This could protract the length of the outage to intolerable levels.

- Not having access to engineers – some micro businesses had been frustrated by not being able to access the engineers who were working on the fault. In addition, some expressed frustration at engineers only being able to spend limited time on a given fault before they had to move on.

Data from the pre-task questions supported the issues described above. 14% of fixed line users and 13% of fixed broadband users cited poor customer service as an issue in regards to their service. Furthermore 4% of fixed line users and 10% of fixed broadband users cited slow speed of response to issues, as a specific problem that they had experienced.

Amongst mobile phone users, poor service was not mentioned. However, 8% did mention 'the contract' as an ongoing issue. From the qualitative findings we know that this generally refers to being locked into what was perceived to be a lengthy contract or being unable to flex the terms without incurring excessive penalties.

> *"The problem I have had with (provider) is that everything works and then it stops and that can be fixed in ten minutes or sometimes it has been a day and a half and that is a disaster for us. Most of the stuff I have got is Cloud based and we can't connect to it, we can't send emails or we can't build websites and we can't do anything at all, so it is a disaster…let's hope they fix this in the next half hour".*
> (IT Support Company, Urban England)

> *"The company that we use is (provider) and they were a local company and the reason I went with them was because I wanted someone that was local that would come out if we had a problem within an hour or so. I've had a problem in the past with (provider) and they were an absolute nightmare. We send our orders electronically, and we send our invoices electronically, and we were unable to do both for about three days. It was just an absolute nightmare and (provider) kept coming out and they kept saying, oh we are only allowed to spend a maximum of three hours on this fault and then we have to move onto another fault".*
> (Domestic Appliance Company, Urban England)

> *"…and going round in circles trying to get in touch with someone that can actually deal with it and sort the problem out, and the time from when you do actually speak to someone finally to getting someone here to sort out the problem".*
> (Restaurant, Urban England)

Location disadvantages

Location disadvantages were as expected most prominent in rural locations. Rural micro businesses felt significantly disadvantaged by virtue of where they were located in a number of respects. These included:

- Slow internet speeds.
- Lack of access to faster broadband.
- Poor mobile phone coverage.

These issues did not apply to all rurally based businesses but a significant proportion, and they were a real impairment on their ability to function. Although many of these respondents wanted such issues to be improved, they had resigned themselves to enduring them as part and parcel of being located in rural areas.

Given the sample size that was used in the research it was not possible to produce statistically significant evidence regarding the above points. However there were a number of data points that suggest that rural locations were disadvantaged:

- Coverage was a greater ongoing issue for rural businesses with approximately 50% mentioning it, compared to the average of 32% (pre-task: caution – low base size, this is an indication rather than a statistical estimate).
- 40% of businesses in deep rural areas stated that speeds were too slow, compared to an average of 23% (pre-task: caution – low base size, this is an indication rather than a statistical estimate).

  "I think compared to a lot of other European countries we are way behind and I think it is something that needs to be looked at because everybody depends on fast internet".
  (Equipment Wholesaler, Urban Northern Ireland)

A restaurant in rural Scotland with the head chef also running the business side:

The customer base was made up of some locals but mainly tourists who came to the area for field sports. The head chef, in his late thirties, ran the kitchen as well as the wider business operation, and was helped out by the head of service. 60% of their time was spent in the kitchen whilst 40% of their time was spent managing the business overall, spending about one hour per day on supplier management. As a restaurant they had high utility bills, paying £5,000 per annum for gas and £13,000 per annum electricity, where as their fixed line and internet costs were £1,200 per annum.

Heavily reliant on the internet for their website, social media, and card payment machine:

They were using their website and Facebook to market the business, and Twitter to contact suppliers. 50% of their bookings were taken online whilst the other 50% were by telephone, but bookings overall were shifting more online. They had started using Facebook to market to customers and also to take booking requests. They found Facebook valuable in terms of being able to easily post the latest menus, dishes and offers via their page, and had achieved 1,300 'likes' to date.

They were also using Twitter to keep in touch with fresh produce suppliers. Suppliers would use Twitter to announce when they were sourcing new, fresh, seasonal ingredients, and followers could then quickly reply with orders. Internally they were using a dining point of sale system to process covers and orders, and Streamline to process card payments, all of which required reliable broadband and mobile phone signal.

Being in a rural location had caused a range of significant communication issues:

The reliability of their internet and mobile signals were ongoing issues. Their broadband was very slow and it was difficult to get a good connection. With 50% of their bookings made via the website their internet needed to be more reliable, and effectively join up their booking system. Mobile phone signal was also very weak and only worked in certain areas of the venue, however they needed to be in touch with suppliers via their mobile on a regular basis. The Streamline card payment machine frequently did not get enough signal to make payments. They were unable to take the machine to the customer, and had to ask them to come to the machine. They had also tried to offer customers Wi-Fi which was generally expected in such venues these days, but the reliability and performance was not good enough, and could not carry both operational needs and customer usage at the same time.

They would like to do more with technology but were held back by unreliable broadband:

They would like to be able to use handheld devices more but they needed better performing and more reliable internet to do this. They also wanted to be able to use tablets in the restaurant so waiting staff were able to type orders directly into the system, and transfer them to the kitchen. This would have helped them turn over covers more efficiently. However they felt their broadband was not good enough to sustain these functions, and they were unsure whether there were any alternative solutions such as Bluetooth or signal boosters to help compensate for these issues.

Business data that had not been remotely backed up and they lost two years' worth of data:

In addition they had experienced a significant loss of business data due to a computer virus. Their old system was backed up internally but a virus had entered their computer system and corrupted all of their files. They had ended up losing two years' worth of data which had impacted on the till system, end of week accounts, and their booking system.

> *"My fishmonger tweets they are going to the port to get a catch of langoustines and I just tweet back that I want a couple of cases".*

> *"When we lost all the files it was a complete disaster. We had to go back to using pencil bookings. It took us a while to recover from that".*

An equestrian centre in rural Scotland run by a husband and wife with 3 employees:

A husband and wife team, both in their late fifties, ran an equestrian eventing and livery centre from an old farm property. They were looking to grow their business in 'pop up' stables that can be used at events around the country. They hosted events and offered stable facilities for hundreds of riders attending international events during the course of the year, as well as hosting school trips and some local customers.

Their website and Facebook were critical to marketing the business:

90% of their customers came through the website and emailed them about events and schedules. All customers who visited the centre were prompted to 'like' it on Facebook and they now had 13,000 followers. Mobile phones were also important to them as they were outdoors much of the time and away from their home based office which relied on residential broadband. They backed up all of their data on an independent hard drive, as they were not able to use Cloud based services to do so.

They felt hampered by the infrastructure that supported their communications:

Being in a rural location they experienced major frustrations with the performance and reliability of their communications infrastructure. Their mobile phones only really worked when calling from their kitchen. However when they were out doors at the facility, they could be out of phone contact and unable to respond for eight or nine hours a day.

Internet speeds were very variable and often poor which was highly disruptive to a business that relied so much on its website, email and Facebook. The router frequently dropped out, and internet speeds were typically very slow, with the router lights often being on orange. If their internet service had been more stable and reliable they would have been able to do more scanning of documents and to have backed up their data using Cloud services. Even changing their computer had caused lots of problems because they were unable to download the drivers for a new printer over the internet. They had to do this from a nearby town centre, and then transport the computer back to their business.

They regretted switching to a new provider for their broadband:

They had previously switched to (provider) for broadband but then experienced a fault on the landline for three weeks. This had a 'dreadful' impact on the business and the response from (provider) was 'very poor'. Because the internet service provider was not the same as the provider responsible for the infrastructure they had to go via (provider) to resolve the issue. However the engineers working on the fault were from the infrastructure provider and they were unable to speak to them. In the end they switched back to the infrastructure provider because they felt it was better to be with the provider that was responsible for the underlying infrastructure that supported their communications.

9.2. Key issue #2 Making optimum decisions and choices

The micro business approach to decision making

Micro businesses demonstrated a particular mind-set that framed how they approached decision making and choice with respect to their communications services and technology. This mind-set was characterised by the following attributes:

- A lack of knowledge and skills – more proactive and sophisticated companies demonstrated a relatively high degree of knowledge in this area. In addition younger business owners and employees could also be relatively knowledgeable about technology in general. However many businesses lacked confidence in their knowledge and skills with respect to communications services and technology.

- A lack of time to think – as already outlined micro business owners were particularly stretched and time poor. These pressures further limited the cognitive capacity they had to devote to optimally researching, understanding and procuring communication services and technology.

- Using a consumer mind-set - many would exhibit more of a consumer mind-set rather than a business mind-set when approaching their communications choices, and business owners could base their decisions more on their own personal experiences rather than more objective evaluations. This was particularly the case with businesses that were reliant on residential services, but could also extend more broadly into areas such as mobile phone contracts.

- Reliance on word of mouth and informal help – related to the above many business owners were simply influenced by what they had heard about via colleagues, or peers who may be working in the same sector or even what another unrelated small business had been using. In addition many older business owners relied on younger colleagues, or even sometimes their own children, to help them out on an informal basis with using things like online.

This micro business mind-set could therefore mean that decisions were made more intuitively, confined to personal experiences, and based on loosely relevant and crude pieces of information, rather than taking a more systematic and deliberative approach to investigating and evaluating their options from a business perspective. This mind-set therefore decreased the likelihood of making optimal and informed decisions in this area.

Figure 24 highlights the informal and relatively uninformed nature of decision making for this audience. This chart illustrates the fact that the three most frequently mentioned information sources are informal and therefore micro business may not be getting the best possible information and advice.

Figure 24: Who is consulted when making communications decisions

Friends and family members are the most frequently consulted source of info and advice

Who is consulted when making communications decisions?

%

Source	%
Friend	42
Family member	36
Business person/networking contact	29
Staff member/colleague	24
Independent IT/telco consultancy	13
Current/prospective supplier	8
IT/Comms support company	6
None of the above	25

Pre-task O5 Do you consult or take advice from any of the following when making decisions about communications in your business? Base: all pre-task answering n=99

NB: Pre-task interviews
Base size: <115

The challenge of making decisions and the 'right' choice with communications services

Micro businesses raised particular challenges when considering potential decisions in this area. Over half the sample (51%) agreed that there was not enough easily understandable information available about different business technologies. Furthermore, 26% disagreed with the statement that they 'were confident in their own ability to choose the right communications technology for their business' (pre-task data). This highlighted what could be a major barrier to micro businesses making optimum use of communications technology. The specific challenges raised by micro businesses with respect to decision making included the following:

• Difficulty comparing information - some businesses felt it was difficult to compare information across providers. Complex pricing and packages, particularly internet and mobile data, could be unclear to micro businesses and cause confusion.

• Lack of trust in provider claims – as already highlighted some micro businesses did look at provider claims about internet speeds and mobile phone coverage in particular as part of their decision making process. However they also questioned the credibility and reliability of such claims. The perception was that mobile phone coverage was often not as comprehensive as claimed, and internet speeds, presented as 'up to x MEG', were seen as too vague and questionable. Given the importance of reliability, performance, and

coverage, micro businesses were keen to be able to make important decisions on as concrete and reliable information as possible.

- Lack of access to 3rd party independent advice – the majority of micro businesses did not use the services of a 3rd party IT and communications support company. Many felt they were not in a position to afford such services or did not feel that what they could provide would justify the investment. However for the minority that had used such services, there had been significant benefits in terms of introducing new technologies and practices such as improving their IT and communications infrastructure, exploiting the online channel more, and ensuring remote backup of business data.

- Information geared more towards consumers and SMEs – the research revealed that there was considerable information available for consumers such as price comparison websites or organisations like Which? In addition SMEs had the advantages of being more able to afford 3rd party support and advice, and potentially more likely to receive an account managed service from a provider, as well as being able to use their size more to bargain and negotiate better deals. Micro businesses could fall between these two stools.

- Navigating unfamiliar services – some companies using wider online services such as search engine optimisation could find it a challenging area to navigate and decide which service and provider to use. The area was largely unfamiliar to them, and there appeared to be many providers offering similar propositions, whilst charging very different prices.

- Reliance on informal help or help from providers - in light of the above, outside of their own limited resources and abilities, micro businesses were forced to rely on informal help from friends, peers and family, or the advice and support of providers themselves, rather than more independent and objective sources.

"There is not a problem with them (phones) if you are just working within the UK, that is absolutely fine, that is very straightforward but as soon as my business partner goes to Italy then the tariffs immediately change, it is far more expensive. It is very complicated as to what we are allowed to do and not allowed to do, and if you make a mistake and start downloading data you get charged five quid a megabyte and things like that. It is quite, quite unpleasant when you have missed it and the bill comes in and it is for £400-£500". (IT support company, Urban England)

Whilst micro businesses did use services such as price comparison websites, the experiences and challenges in this area indicated that there may be an unmet need for independent and credible information, advice and guidance, *specifically designed* for micro businesses and their particular communication needs.

Many micro businesses suspected that they could be doing more with communications, and were keen to make optimum choices. Whilst some had accessed business relevant information and advice via publically available schemes, this was mainly amongst a small group of start-up companies.

The following charts (figures 25, 26, 27, 28) highlight aspects of the decision making process for each of the communication services the research reviewed.

Overall it was apparent that micro businesses felt least informed about decisions relating to fixed lines, and that they felt more informed about fixed and mobile broadband and mobile phone services.

That said, for all four areas there was a demand for easier to understand information, and more ability to make comparisons between competitor offers.

Figure 25: Issues relating to decision making: fixed line phone

Issues relating to decision making: fixed line phone ☎

Ease of finding out about fixed line suppliers and services

- ■ Easy
- ■ Quite easy
- ■ Easy if know what to look for
- ■ Hard
- ■ DK

%

Pie chart values: 24, 34, 2, 7, 32

How informed you feel about choices/decisions

% | 11 | 54 | 12 | 7 | 16 |

- ■ Very informed
- ■ Fairly informed
- ■ Not very informed
- ■ Not at all informed
- ■ Don't know

What would help with decisions?

%

Easy to understand info	16
Comparison	11
Impartial advice	11
Understanding of total cost	8
Better service	5
Standardised research tool	5
Visit	3
Other	3
Nothing	29
DK	18

Semi-structured Q22 How easy or difficult is it to find out about fixed line suppliers and services? Q23 How informed do you feel about the choices/decisions you make in this area? Q24 Q25. And what would help you make better decisions/choice? Base: All semi-structured answering if service applicable n=41*/57/38* *CAUTION LOW BASE

NB: Semi-structured interviews Base size: <75

As can be seen from the top left chart, many respondents in the sample felt that it was not easy (or they weren't sure how easy it was) to find out information about relevant suppliers and services. 58% felt finding information was easy or quite easy.

Approximately two thirds of participants in the research felt informed in regards to decision making in this area.

Easier to understand information, comparisons and impartial advice were most frequently mentioned opportunities that would help them make their decisions.

Figure 26: Issues relating to decision making: fixed broadband

Issues relating to decision making: fixed broadband

Ease of finding out about fixed BB suppliers and services

- Easy
- Quite easy
- Hard
- DK

%

- Easy: 38
- Quite easy: 32
- Hard: 17
- DK: 11

How informed you feel about choices/decisions

% | 22 | 54 | 15 | 4 | 6

- Very informed
- Fairly informed
- Not very informed
- Not at all informed
- Don't know

What would help with decisions?

%

Easy to understand info	21
Comparison sites	12
Impartial advice	12
Trial periods	5
Info on download speeds	2
Standardised research tool	2
Understanding total costs	2
Other	5
Nothing	31
Don't know	17

Q52 How easy or difficult is it to find out about fixed BB suppliers and services? Q53 How informed do you feel about the choices/decisions you make in this area? Q55 What would help in making better decisions/choices? Base: all semi structured answering if service is applicable n=47*/54/42* *CAUTION LOW BASE

NB: Semi-structured interviews
Base size: <75

Amongst the sample the majority (seven out of ten) believed that finding information about relevant suppliers and services was easy, and a similar proportion felt informed in regards to decision making in this area. There is still room for improvement in this area, with one in five in each instance feeling it was hard to find out information or not feeling informed.

Easier to understand information, comparison sites, and impartial advice were again the most frequently mentioned opportunities that would help them make decisions.

Figure 27: Issues relating to decision making: mobile phone

Issues relating to decision making: mobile phones

Ease of finding out about mobile suppliers and services

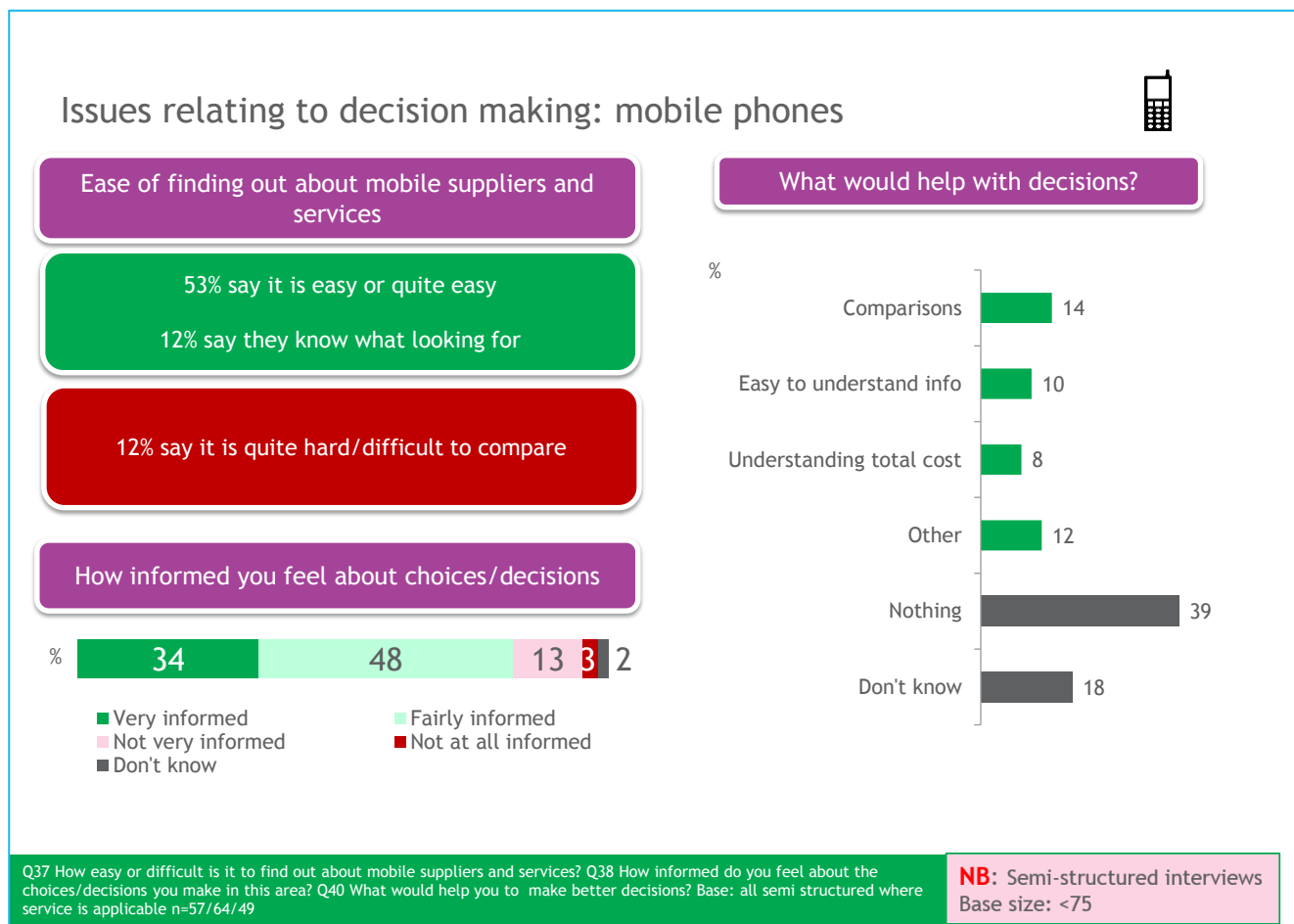53% say it is easy or quite easy

12% say they know what looking for

12% say it is quite hard/difficult to compare

How informed you feel about choices/decisions

% | 34 | 48 | 13 | 3 | 2

- Very informed
- Fairly informed
- Not very informed
- Not at all informed
- Don't know

What would help with decisions?

%

Category	Value
Comparisons	14
Easy to understand info	10
Understanding total cost	8
Other	12
Nothing	39
Don't know	18

Q37 How easy or difficult is it to find out about mobile suppliers and services? Q38 How informed do you feel about the choices/decisions you make in this area? Q40 What would help you to make better decisions? Base: all semi structured where service is applicable n=57/64/49

NB: Semi-structured interviews
Base size: <75

More than half of respondents said that that finding information about relevant suppliers and services was easy, and most felt informed in regards to decision making in this area.

Comparisons were seen as slightly more important than easy to understand information in terms of helping to make decisions.

Figure 28: Issues relating to decision making: mobile internet

Issues relating to decision making: mobile internet

Ease of finding out about mobile Internet suppliers and services

- Easy
- Quite easy
- Quite hard
- Easy if know what to look for
- Don't know

%
15
5
14
56
12

What would help with decisions?

%
- More information — 18
- Easier to understand info — 15
- More comparative info — 15
- Independent info — 6
- Comparison tools — 3
- Easier to compare info — 3
- Nothing — 26
- Don't know — 24

How informed you feel about choices/decisions

%
33 | 44 | 13 | 2 | 9

- Very informed
- Fairly informed
- Not very informed
- Not at all informed
- Don't know

Semi-structured Q69 How easy or difficult is it to find out about mobile Internet suppliers and services? Q70 How informed do you feel about the choices/decisions you make in this area? Q72 What would help in making better decisions/choices? Base: all semi structured where service is applicable n=41/55/34

NB: Semi-structured interviews Base size: <75

Nearly seven out of ten respondents believed that finding information about relevant suppliers and services was easy, whilst slightly more felt informed in regards to decision making in this area. There was therefore still room for improvement, although it was a better situation than for the other communications services assessed in this research.

More information in general would be helpful for this technology (as may be expected for a relatively new technology). Comparison tools were seen as less useful in the context of mobile internet than for other communications services.

The challenge of deciding whether to invest in communications

Whether or not to invest a capital sum in communications was a bigger issue than the running costs of communications for micro businesses. Many in the sample were faced with far larger bills than the ongoing costs of their communications. For example utilities could cost many hundreds and sometimes thousands of pounds, whereas the running costs for mobile, fixed line and internet rarely exceeded a few hundred pounds, and were often a lot less.

The running costs of communications were therefore rarely raised as a spontaneous issue amongst micro businesses. Having said this, as relatively cash poor and frugal micro businesses, it was always seen as good sense to look for ways to save money by default, and some had switched providers in the past in order to reduce their overheads in this area.

A more challenging area in terms of financing communications was whether or not to invest capital in the area. A number of businesses were considering increasing investment in communications, in particular taking the step of developing a website or making an existing website transactional.

However in such instances it could be a struggle for them to work out the business benefits or return on investment of such a decision. Micro businesses often lacked capital to invest in general, and when they did have access to investment funds this could be prioritised for a new tool or machinery. Opportunities for them to invest were therefore relatively limited and precious, and they could ill afford to make the wrong decision. This financial sensitivity could compound their natural sense of risk aversion.

On this basis many would value the ability to make a more concrete business case for investing in communications based on a clearer sense of what the material return would be. This would help to overcome some of the barriers outlined above.

9.3. Key issue #3 Micro businesses may be more reluctant to switch

Interviews revealed that there may be a reluctance to switch amongst the sampled micro businesses.

47% disagreed that they *'change suppliers as often as I need to, to get the best deals'*. A key barrier to switching was that they did not want to disrupt their existing service. If using residential services, switching over could mean being without internet for a few weeks which would be intolerable form a business perspective, but this fear also applied to switching business grade services. In addition inflexible contracts could also be raised as a barrier to switching.

Those who had switched often did so in pursuit of cheaper costs but then frequently regretted their decision when the service was disrupted and the provider response was poor. These sorts of experiences could drive a preference for the provider they saw as responsible for the infrastructure, and the businesses could avoid the risk of having to channel all their issues via a different service provider when there was a fault or disruption to the service.

A potential reluctance to switch also needs to be seen in the context of how confident micro businesses felt about negotiating better deals with existing providers. For some micro businesses there was a subjective sense of resentment about how they felt treated by providers as a customer. They felt they lacked any bargaining power compared to larger companies, and some micro businesses perceived that providers considered them to be 'too small' to care about.

> *"Being a small business just means being trampled over not only by the big businesses but by the legislation which allows them to trample over you".*
> (Restaurant, Urban England)

> *"We are in the process of moving our broadband supplier from (provider) to (provider) mainly on the recommendation of our IT guy who is a specialist in this and from his experience knows that (provider) is more reliable, and there is better bandwidth, and would be better for us. When we came to cancel our service after finding it wasn't what we were promised, we found that we couldn't get out of our broadband contract for two years which left us sort of stuck and quite unhappy".*
> (Domestic Appliance Company, Urban England)

Figure 29 below shows the percentage of respondents who had switched each service in recent years. (The data source is the semi-structured analysis).

Figure 29: Switching rates in recent years

If switched in recent years	Fixed Line (%)	Fixed broadband (%)	Mobile phone (%)	Mobile internet (%)
Switched	40%	38%	24%	22%

9.4. Key issue #4 Micro businesses exposure to risk in relation to communications

Micro businesses could be particularly vulnerable to certain risks due to their approach to communications. Those that were aware of these risks had often learnt the hard way through experience when they had lost business data or experienced a breach of cyber security. Other businesses had been made aware of these risks through 3rd party advice and support. However many were unaware of their exposure in this area. The two most significant risks were in terms of the following:

- Reliance on residential services – many micro businesses were working from home either as their full time business premises or in combination with more formal premises. This meant that these businesses were subject to residential service levels and support when the service was disrupted.

- Lack of awareness about data backup – many micro businesses were unaware of the need to backup business data remotely. Some who were using 3rd party support with their communications had been introduced to the practice via this route, however others had learnt through the experience of losing all, or a significant part of their data. This had ranged from losing all business contacts from a mobile, through to a total loss of all business data for the preceding two years. The resulting disruption to the business varied from a few days to a permanent loss of data. Those who had experienced the issue had immediately changed their approach to backup as a result.

In addition to the above more major areas of risk, another area of concern emerged around awareness of cyber security. Although less significant than the aforementioned risks, the lack of awareness about cyber security may be of increasing significance over time if micro businesses become heavier users of the online channel for e-commerce.

Some respondents were clearly not conscious of the cyber security risks. Cyber security was not a top of mind issue amongst micro businesses and was rarely raised spontaneously by the sample.
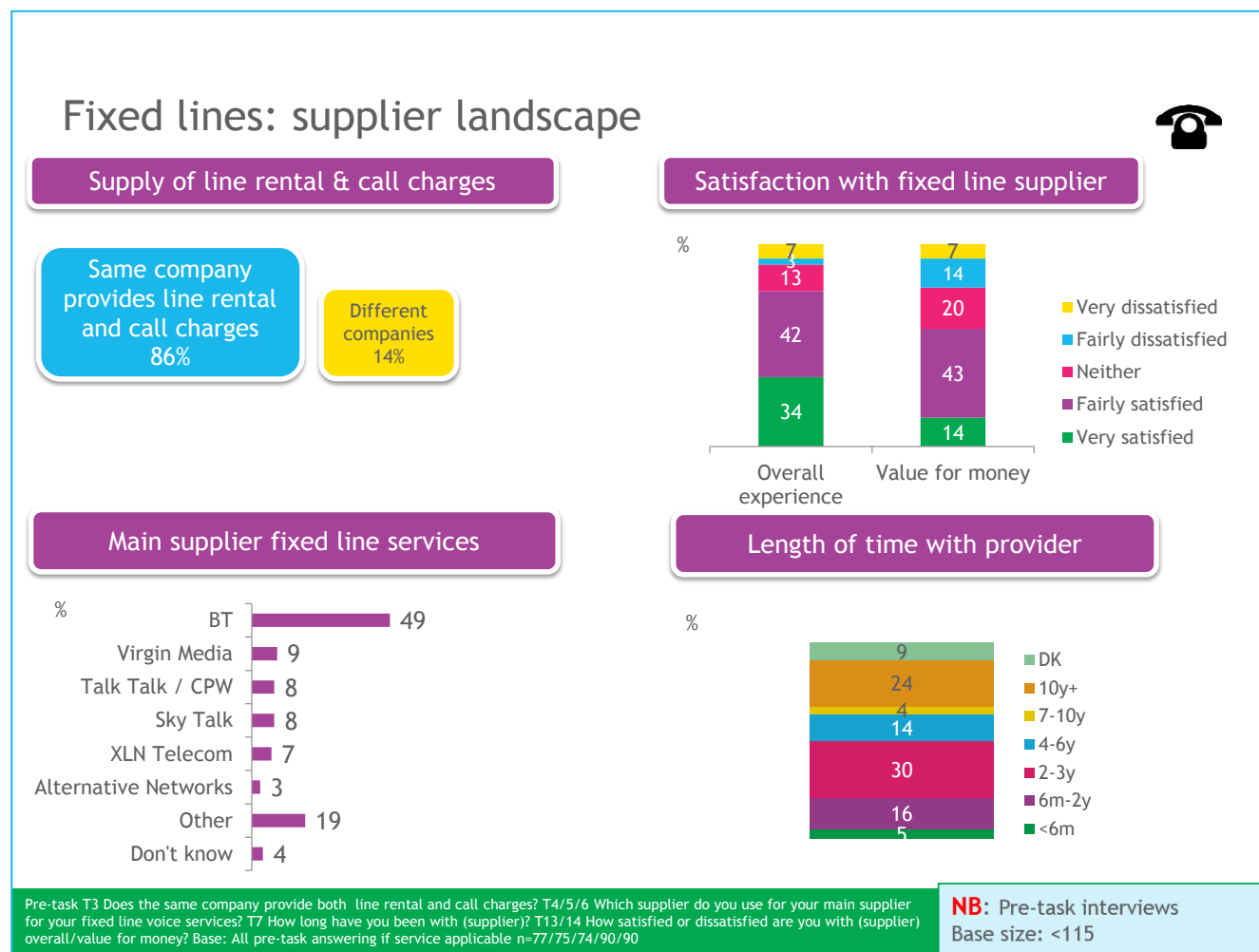
9.5. Issues by service – Fixed Line

Frustrations with fixed line were relatively minor however for those not using VoIP a conventional landline could be more time consuming and laborious to scale up in comparison. Some export business could be frustrated by the lack of competitive international call packages from mainstream providers and others were also frustrated by the cost of diverting calls to mobile. Diverting calls to their mobile was of particular importance to micro businesses as it was another feature of communications that enabled them to overcome their capacity constraints, and make themselves always accessible to customers.

Therefore despite the central and critical role that fixed line was playing amongst micro businesses many were simply not using it to its fullest potential, e.g. using VoIP, which could potentially offer them a more efficient, flexible and lower cost option for their business.

Figure 30 shows overall satisfaction with fixed line services, as well as the supplier landscape.

Figure 30: Fixed lines: supplier landscape

Fixed lines: supplier landscape ☎

Supply of line rental & call charges

Same company provides line rental and call charges
86%

Different companies
14%

Satisfaction with fixed line supplier

%

	Overall experience	Value for money
Very dissatisfied	7	7
Fairly dissatisfied	3	14
Neither	13	20
Fairly satisfied	42	43
Very satisfied	34	14

■ Very dissatisfied
■ Fairly dissatisfied
■ Neither
■ Fairly satisfied
■ Very satisfied

Main supplier fixed line services

%

BT	49
Virgin Media	9
Talk Talk / CPW	8
Sky Talk	8
XLN Telecom	7
Alternative Networks	3
Other	19
Don't know	4

Length of time with provider

%

DK	9
10y+	24
7-10y	4
4-6y	14
2-3y	30
6m-2y	16
<6m	5

■ DK
■ 10y+
■ 7-10y
■ 4-6y
■ 2-3y
■ 6m-2y
■ <6m

Pre-task T3 Does the same company provide both line rental and call charges? T4/5/6 Which supplier do you use for your main supplier for your fixed line voice services? T7 How long have you been with (supplier)? T13/14 How satisfied or dissatisfied are you with (supplier) overall/value for money? Base: All pre-task answering if service applicable n=77/75/74/90/90

NB: Pre-task interviews
Base size: <115

A large majority of the sample used the same supplier for line rental and call charges.

In terms of satisfaction, three-quarters were satisfied overall, and more than half with the 'value for money' element. This effectively means that approximately one quarter chose to say that they were neither fairly nor satisfied with the service they received from their fixed line supplier, and even more (41%) reported that they were neither very nor fairly satisfied with the value for money of the service.

## 9.6. Issues by service - Internet

The main issues with respect to the internet included the following:

- The availability of superfast and fibre optic broadband – many micro businesses were keen to see the continued roll out of faster internet.

- The business impact of service disruption and poor provider response – those businesses who had experienced losing their internet service, or had experienced ongoing performance issues, highlighted how difficult and disruptive this could be for the business, particularly when compounded by poor service response from providers when attempting to address the fault.

- Trusting provider claims – claimed internet speeds were important to micro businesses in helping them evaluate their different options and choose which provider to go with. However many questioned the accuracy and reliability of provider claims in this area, particularly when the claimed speed was expressed in terms of '*up to X MEG'*.

However despite these issues, further exploitation of the internet was a key area of potential growth and ambition for the sample of micro businesses with many expressing a desire to make more of the channel. Figure 31 details the suppliers used and general satisfaction with the fixed broadband market.

Figure 31: Fixed internet: supplier landscape
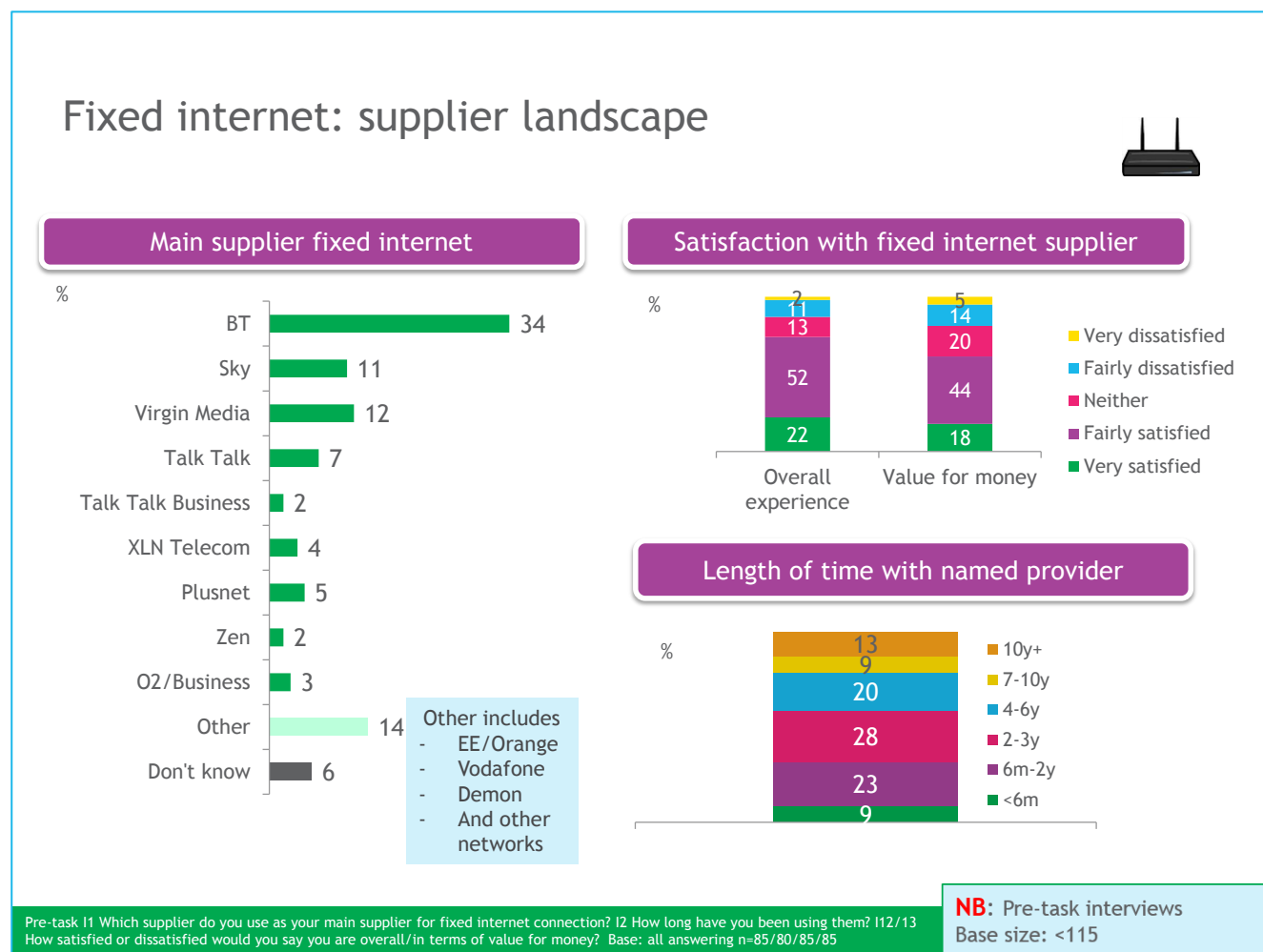
In terms of satisfaction, three-quarters were satisfied overall, including more than six in ten with the 'value for money' element. Approximately one quarter of micro businesses in the sample therefore stated that they were neither fairly nor very satisfied with the service they received from their broadband supplier, and (as with fixed lines) a greater number (almost half) maintained that they were neither fairly nor very satisfied with the value for money of the service.

9.7. Issues by service – Mobile

The main issues pertaining to mobile usage focused around network coverage in terms of the following:

- Quality of network coverage – In rural areas the issue was significant and ongoing, severely impairing businesses ability to use the service. However for other businesses poor or variable mobile phone coverage could still be an issue.

-

- Trust in provider claims – similar to the area of the internet, micro business questioned the reliability of provider claims with respect to mobile phone network coverage. A number of micro businesses questioned provider claims to be the most comprehensive and reliable network in a given area, particularly when this had not lived up to their experience of using the service.

Figure 32 details the suppliers used and general satisfaction with the mobile phone market.

Figure 32: Mobile phones: supplier landscape
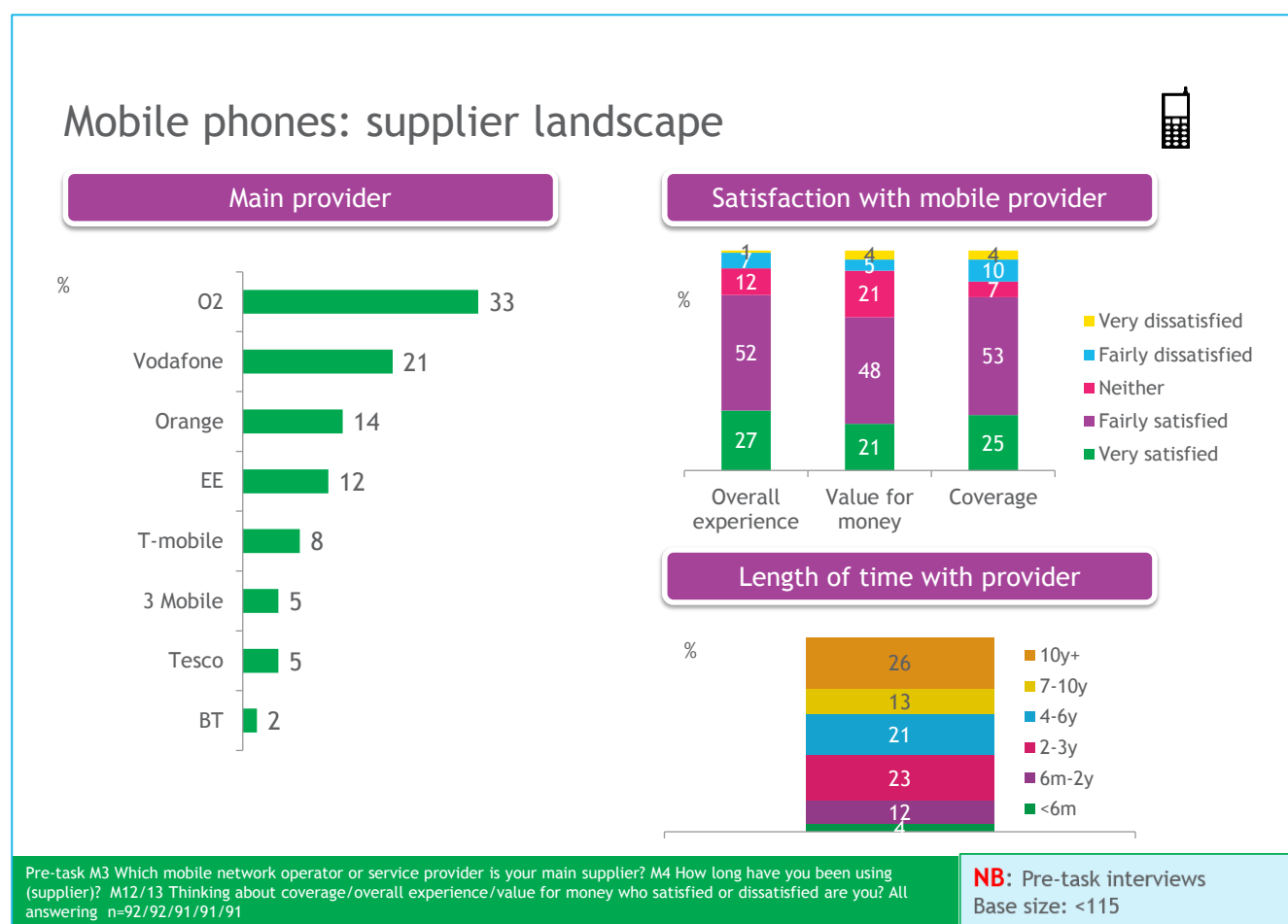
Overall, around one fifth of respondents reported that they were neither very nor fairly satisfied with their mobile phone service, and almost one third reported a lack of satisfaction with the VFM of their mobile phones.

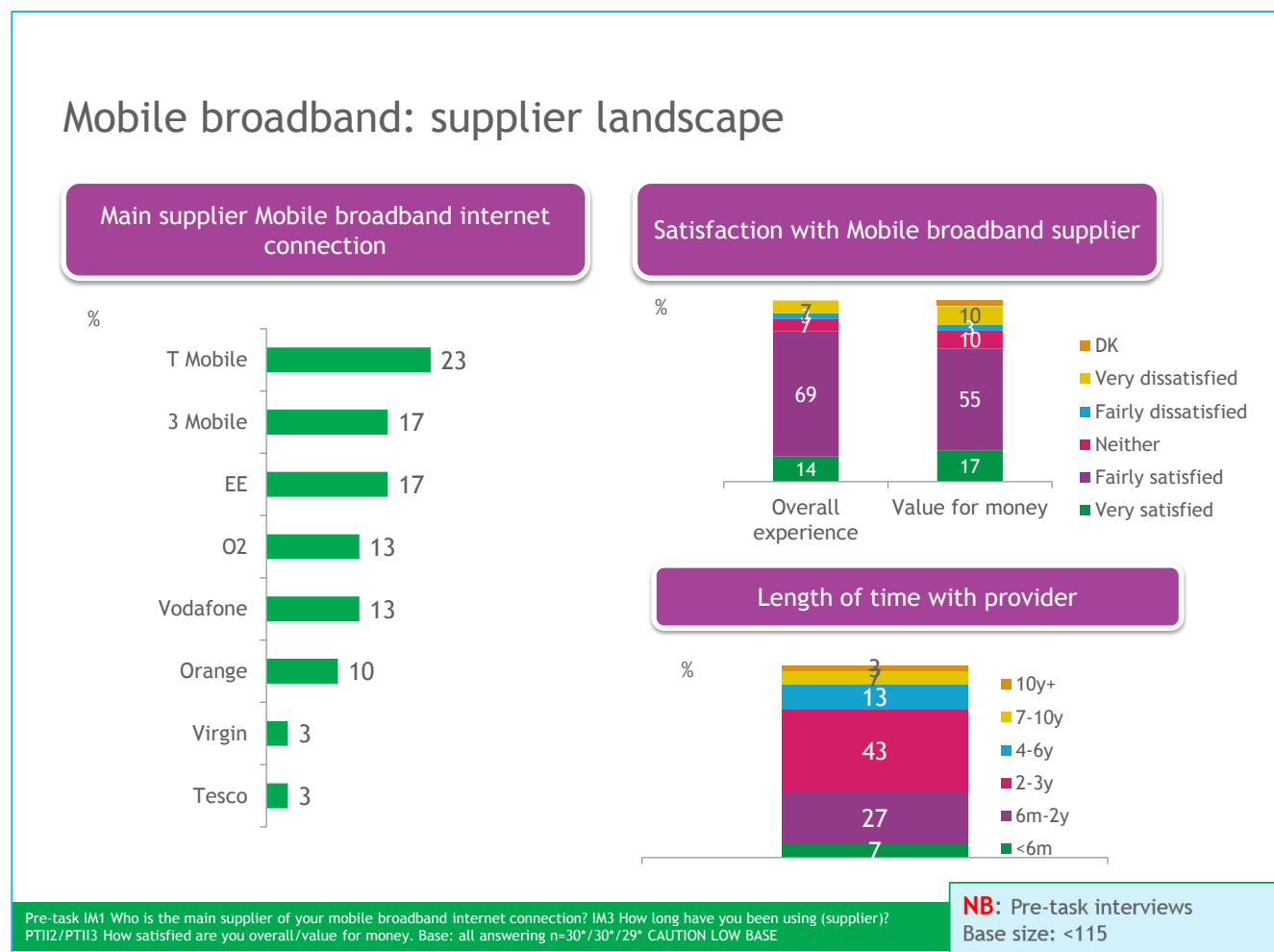O2 is the dominant brand, being used by one third of the sample.

9.8. Issues by service - Mobile Internet

The main issues pertaining to mobile internet included the following:

- Understanding of data allowances – data allowances could be relatively difficult for micro businesses to understand. They sometimes struggled to work out what a given data allowance meant in terms of actual usage as the information was relatively abstract.

- Desire for more comprehensive 3G and 4G – there was a general desire for faster and more comprehensive roll out of 3G and 4G. More comprehensive roll out would allow micro businesses to make more use of their mobiles particularly with respect to mobile internet services.

For many micro businesses, tablets potentially delivered an optimum balance between mobility and functionality, ideally allowing them to work from anywhere at any time and therefore work around their capacity limitations. However greater use of such devices depended heavily on the greater roll out of robust and reliable mobile internet, which many micro businesses were keen to see. Figure 33 shows the supplier landscape and general satisfaction levels.

Figure 33: Mobile broadband: supplier landscape

Mobile broadband: supplier landscape

Pre-task IM1 Who is the main supplier of your mobile broadband internet connection? IM3 How long have you been using (supplier)? PTII2/PTII3 How satisfied are you overall/value for money. Base: all answering n=30*/30*/29* CAUTION LOW BASE

NB: Pre-task interviews Base size: <115

Fewer than one in five respondents (17%) reported that they were neither fairly nor very satisfied with the service they received from their mobile internet service, and slightly more stated that they were not satisfied with the value for money of the service.

Everything Everywhere was the dominant brand, being used by 50% of respondents.

9.9. Issues by service – value for money

Analysis of value for money ratings shows room for improvement with satisfaction for all services, as can be seen in figure 34. Fixed voice and internet services showed the largest proportion of dissatisfaction.

This seems to be driven by a number of factors. At one level it should be remembered many of these services (especially fixed line and to a degree fixed internet) were seen as basic, although essential, utilities, and as such expectations were that costs should be low. There may be some residual resentment for any spend, even if overall costs are relatively low compared to other business expenditures.

With fixed line in particular, it may also be that this service was now seen as less valuable with mobile phone and internet overtaking it or challenging fixed line in terms of business reliance and relevance. Therefore fixed line could potentially be seen as an increasingly unwarranted expense.

Interestingly, mobile internet was seen as offering the best value for money, perhaps because the product was still relatively new and emergent. It was possible that micro businesses were grateful that the service exists and hadn't yet questioned its cost relative to other services.

Figure 34: Satisfaction with Value for Money

Satisfaction with VFM	Fixed Line (%)	Fixed broadband (%)	Mobile phone (%)	Mobile internet (%)
Satisfied	57	62	69	72
Dissatisfied	21	19	9	13
Neither	20	20	21	10
Don't know	-	-	-	5

10. Unlocking the potential of communications

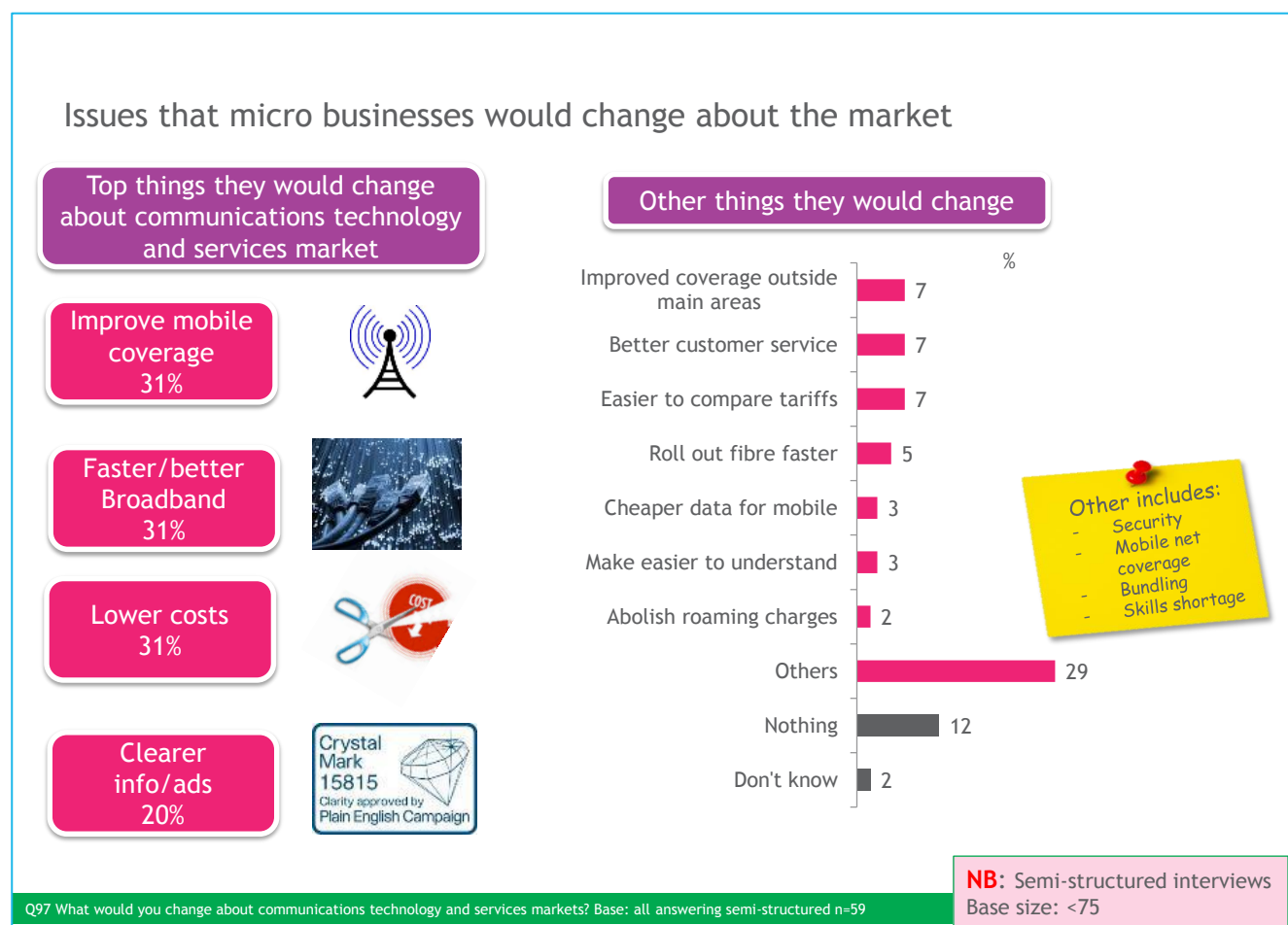## 10.1. Barriers to exploiting communications more in the business

The potential to exploit communications more faced two overall barriers, which can be broadly seen as external (primarily supplier and market driven), and internal (most significantly in terms of the knowledge levels of the business owners).

External barriers

Figure 35 highlights the external barriers. The column on the left shows the main things that micro businesses would change about the market. These represent the main external barriers that may be hampering micro businesses from making more use of communications.

Improved mobile coverage and faster/better broadband were mentioned by significant numbers, with each mentioned by just under one third of respondents in the semi-structured analysis. The requests for faster/better broadband included some specific reference to faster roll-out of fibre, as well as more general comments in regards to improved speed and data capacity.

Figure 35: Issues that micro businesses would change about the market

Issues that micro businesses would change about the market

Top things they would change about communications technology and services market

- Improve mobile coverage 31%
- Faster/better Broadband 31%
- Lower costs 31%
- Clearer info/ads 20%

Crystal Mark 15815 Clarity approved by Plain English Campaign

Other things they would change

	%
Improved coverage outside main areas	7
Better customer service	7
Easier to compare tariffs	7
Roll out fibre faster	5
Cheaper data for mobile	3
Make easier to understand	3
Abolish roaming charges	2
Others	29
Nothing	12
Don't know	2

Other includes:
- Security
- Mobile net coverage
- Bundling
- Skills shortage

Q97 What would you change about communications technology and services markets? Base: all answering semi-structured n=59

NB: Semi-structured interviews Base size: <75

Internal barriers

Across the sample many micro businesses suspected that they could be doing more with communications services and technology. Except for the relatively more proactive and sophisticated segment of adopters, many micro business owners struggled to specifically define what else they could be doing, but they generally felt that they were not exploiting communications to their full potential for the benefit of the business.

Key internal barriers to the further exploitation of communications included the following:

- Lack of knowledge and confidence – many micro businesses were conscious that their knowledge about communications services and technology was limited, and often confined by whatever they had experienced to date as a consumer as much as a business.

- Little access to advice and information specifically designed for micro businesses – whilst micro businesses did utilise comparison sites designed for consumers, the majority of the sample had not procured the services of a 3rd party adviser and did not experience the relatively more account managed services that an SME may benefit from. This indicated an unmet need for information and advice specifically targeted at micro businesses and their particular needs. This barrier was even more significant in light of the fact that micro businesses had very little capacity to devote to finding out about communications themselves.

The semi-structured qualitative analysis indicated that 15% of the sample said that external advice, and 7% said that better/easier to understand information, would help them exploit communications technology and services more in the business.

Figure 36 highlights the primarily internal barriers that appear to be impairing increased use of communications technology amongst respondents. Keeping up with technology developments, and simply understanding it enough, were mentioned most frequently, again suggesting that a lack of awareness, knowledge and understanding were key barriers.

> *"I think running a small business, there are only three of us working here on a daily basis, and we have got a lot of horses to look after, and sometimes it is very difficult to find the time to actually want to work with technology. Then to be able to look into changing my suppliers to benefit myself, I realise in the long term this would be good, but it is physically finding the time to do that when my time is better spent outside teaching, and earning money to keep the business afloat, and to pay the staff wages".*
> (Equestrian Centre, Rural Wales)

Figure 36: Challenges faced if wish to use communications technology to move the business forward
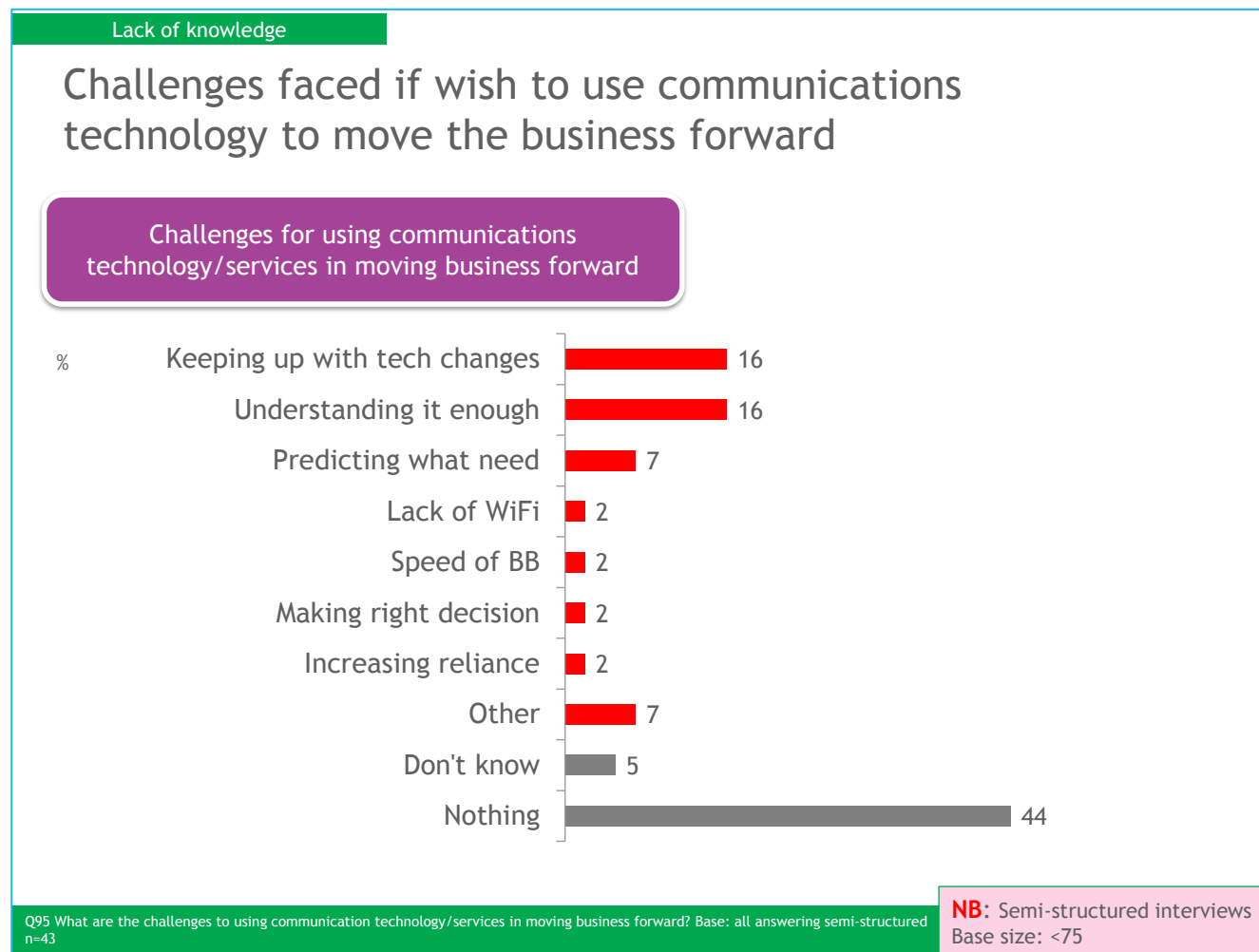
10.2. Future plans and opportunities to exploit communications further

Looking forward, micro businesses saw communications as continuing to be important and critical for the future and for many businesses communications were strongly linked to ongoing business performance. Although business owners were often unable to be specific or precise about future opportunities to exploit communications, respondents highlighted a number of areas where they felt their approach could be developed further. These included the following:

- Communications health check – many business owners felt that an independent and expert review of what they were currently doing would help them improve their approach to communications.

- Exploiting online more – the most significant area of potential exploitation of communications was around harnessing the benefits of the internet and online. This spanned a number of possibilities, in particular developing a greater web presence and promotion of the business online, potentially developing an App, and using social media more.

- Purchasing more technology – in particular tablets and smartphones, as well as lap tops and PCs.
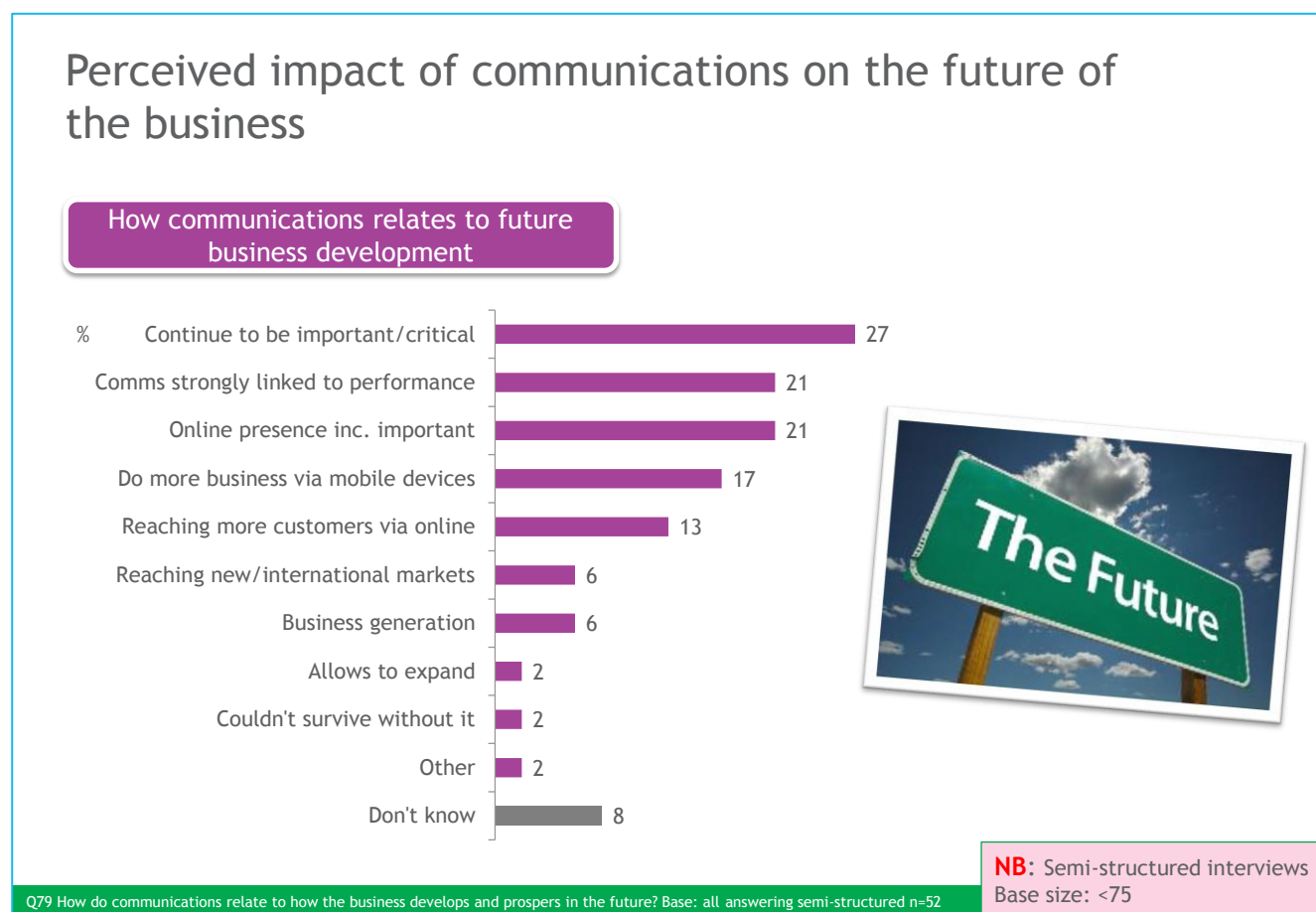
- Integrated mobility – Business owners expressed a strong interest in being able to work more from any location and integrate across devices, for example being able to access their work or business via a tablet. This was one of the ways that technology could potentially help them overcome their capacity constraints and enable the business owner to operate from anywhere at any time.

Figure 37 supports the view that communications were seen as linked to the future of the business. When asked in the semi-structured interviews *'How do communications relate to how the business develops and prospers in the future?'* a variety of responses were generated.

As a minimum, respondents saw communications as continuing at their current level of importance or generally related to ongoing performance. However, others were more specific in their thinking and in particular mentioned online, with approximately one in five respondents seeing an online presence as more important, and others seeing online as offering opportunities to reach more customers. In addition, doing more business via mobile devices was also seen as a part of the future use of communications in the business by just under one in five respondents.

However it should be noted that of those who participated in the semi-structured interviews, over half did not have any future plans regarding their communications. Making the most of communications may therefore require ongoing promotion to mobilise micro businesses around the tangible business benefits that can be realised through these services and technologies.

Figure 37: Perceived impact of communications on the future of the business

Perceived impact of communications on the future of the business

How communications relates to future business development

	%
Continue to be important/critical	27
Comms strongly linked to performance	21
Online presence inc. important	21
Do more business via mobile devices	17
Reaching more customers via online	13
Reaching new/international markets	6
Business generation	6
Allows to expand	2
Couldn't survive without it	2
Other	2
Don't know	8

NB: Semi-structured interviews
Base size: <75

Q79 How do communications relate to how the business develops and prospers in the future? Base: all answering semi-structured n=52

Appendices