

**Results of the exploratory study on
Cornish Small to Medium-sized Enterprises' (SMEs)
intentions, experiences, and outcomes of
adopting Superfast Broadband**

By Jude Anthonisz

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1.0 Executive Summary

The in-depth semi-structured interviews of the 12 Small to Medium Sized Enterprises (SMEs) that have adopted Superfast Broadband (SFB) reveals a number of themes that gives valuable insight to the status and opportunities for the Superfast Cornwall Programme (SCP).

There was an acute and latent demand for faster and resilient Internet access by these SMEs. In most cases, SFB has satisfied the demand from these SMEs who represent a broad range of industries.

A minority of the SMEs were influenced by the availability of SFB in Cornwall in making the decision to relocate their businesses from other counties in the UK.

The vast majority of the SMEs saw improvements to their operations through a combination of higher productivity¹, reduced costs, ability to innovate, and create employment within Cornwall. All of the SMEs acknowledged that whilst SFB contributed to these outcomes, the outcomes would not been met unless SFB was part of a series of other activities, initiatives, and investment undertaken by them.

Similarly, the vast majority of the SMEs have been able to improve customer relationships. A significant minority have improved supplier relationships, and whilst collaborating does not feature highly amongst the SMEs, there was a greater awareness and a lower barrier to experiment with this area. The low levels of collaboration present an opportunity for the SMEs and SCP alike.

The issues and barriers regarding acquisition, implementation and exploitation of SFB appeared to be the unreliable communication and service delivery experienced in acquiring and implementing SFB. Similarly, the majority of the SMEs have not needed support from SCP or another source in acquiring and implementing SFB, as the majority had access to Information Technology (IT) skills. The SMEs that did receive support for acquiring and implementing SFB did value it.

¹ The definition of productivity was the SMEs view of productivity, which varied from SME to SME.

Furthermore, the SMEs believed if support to exploit SFB was available from trusted sources and delivered in a suitable format, it would be valued and enable further growth. The type of support expressed as valuable by the SMEs included: provision of information, advice, and consultancy services. The subject matter for this support cited by the SMEs as being valuable was: SFB, Internet services, business strategy and planning, and IT.

The need for support for both aspects of acquisition and exploitation was also valued by the SME would has yet to adopt SFB.

Lastly, the vast majority of the SMEs believed that the adoption of SFB has brought opportunities to them. Seven of the SMEs cited that new markets were accessed without significant increase in costs. Additionally, two of the SMEs cited that SFB enabled innovation.

2.0 Recommendations

Based on the findings, a series of recommendations are made to build on both the apparent successes and issues faced by the SMEs that have adopted SFB for at least twelve months as well as those SMEs who are yet to adopt and exploit SFB.

2.1 Recommendation one

SCP reviews its current arrangements for direct provision of support services to SMEs to enable SMEs to further exploit SFB and IT, achieve further growth, or improve productivity. Support in the form of grants should also continue. Please see sections 5.8, 5.9, 6.9, and 6.10 for the rationale and further detail.

2.2 Recommendation two

SCP considers how the SMEs who are yet to adopt SFB can be reached and supported. Please see sections 5.8, 5.9, 6.9, and 6.10 for rationale and further detail.

2.3 Recommendation three

SCP considers how indirect support (i.e. via partners of SCP or other third parties who are perceived as trusted sources by SMEs) can be given to SMEs in conjunction with recommendations one and two, to ensure sustainability of support beyond the current planned

duration of the programme. Please see sections 5.8, 5.9, 6.9, and 6.10 for the rationale and further detail.

2.4 Potential implications of the recommendations

The potential implication of recommendations one and two is that a segmented approach to development and delivery of support services and products to target the differing groups of SMEs may be required. This is because the needs of the group of SMEs that have adopted Superfast broadband and are in a mature stage of exploiting it (reflected in recommendation one) and the needs of the group of SMEs that are yet to adopted or exploit SFB (reflected in recommendation two) are likely to be different.

The implication of recommendation three is that the programme's role would alter more towards accrediting or facilitating support rather than delivering or developing support services or products.

It is also possible to use third parties to deliver support services or products if the direct provision of segmented support services or products is not feasible.

3.0 Overall themes, correlations, and insights

The following overall themes and relationships emerged from the findings:

- No specific industry was perceived as gaining a higher or lower benefit or making a success of SFB.
- There was no correlation between the SMEs having a business strategy at the outset and opportunities available to them because of adopting SFB. Please see sections 6.2 and 6.7 for detail.
- However, there was a correlation between the SMEs experiencing acute problems before adopting SFB and a poor experience after acquiring SFB. Please see sections 6.1 and 6.3 for detail.
- Similarly, the vast majority of the SMEs have experienced productivity improvements². Please see section 6.5 for detail.
- The vast majority of the SMEs have experienced positive outcomes regarding customer relationships. Please see section 6.6 for detail.
- A significant minority of the SMEs have been able to increase the number of people employed within Cornwall, by proceeding with their business plans sooner and more confidently. However, all the SMEs were clear to communicate that while SFB played a part in this achievement, a series of other activities, changes, and investments by them were also necessary to ensure that the outcomes sought were achieved.

4.0 Aim and method of research

This section sets out the key findings from this qualitative exploratory study. Further details are in section 6.0.

The aims of this research were to establish the intentions, experiences, outcomes, and opportunities of Cornish SMEs that have an SFB connection. Therefore, the research was carried out through use of semi-structured interviews from at least 12 SMEs that have had a connection for at least 12 months.

Quantitative methods of research, such as the use of surveys, were discounted as it would not have resulted in the depth or accuracy of data collected. The 12-month period of SFB

² The definition of productivity was the SMEs view of productivity, which varied from SME to SME.

connection was judged as being sufficient for an SME to cycle through the steps in the journey of SFB acquisition through to being able to demonstrate outcomes of doing so.

In execution of the research, 14 interviews were carried out between 9 to 18 July 2013. Two of the SMEs interviewed had either ceased their SFB connection or are still waiting to get connected to SFB.

However, given the aims of the research, this report focuses on the findings from the 12 SMEs that have been connected to SFB for 12 months. However, given the potential value to SCP that could also be gained from the remaining two SMEs, key findings from these interviews are also included in section 6.10.

The questions posed to the SMEs reflected the research objectives as well as findings from known and credible previous studies across the globe. The research objectives were to establish:

4.1 What is SFB?

More specifically - what features and benefits does it offer over conventional broadband? What equipment is necessary to exploit these features and benefits? What skills, knowledge, or support services were required to make use of and exploit it? What were the costs involved in acquisition and maintenance?

4.2 What were the business goals of the SMEs before connecting?

More specifically - achieve significant growth and/or higher profits? Maintain current turnover and profit levels? Serve the local community? Subsist?

4.3 What has been done with SFB by the SMEs since connection?

More specifically - has it been fully integrated into all parts of the business? Being trialled in a part of the business? Connected but no further action taken?

4.4 If no further action has been taken by an SME since connection, why was this?

For SMEs that have either trialled or fully integrated superfast broadband into their business practises:

4.5 What effect has it had internally?

More specifically - on operations, running costs, energy use, time taken to complete tasks, travel, procedures, and the number of staff employed?

4.6 What effect has it had on relationships?

In other words, with suppliers, customers, partners, local communities, and the approach to communication with these groups?

4.7 What opportunities has SFB provided?

More specifically - has it brought in delivering either new products or services?; attracted new customers?; or increased sales of existing products or services? What was the effect of this on the number of staff employed from the local community?

The existing research literature reviewed to support development of the research questions into a form that validates the content of the semi-structured interviews included the following areas:

- SME broadband or superfast broadband adoption in other countries.
- SME adoption of new technology in other part of the UK and abroad,
- Adoption of new technology by businesses regardless of their size, again globally.

5.0 Highlights of findings

This section presents the key insights gained from interviewing the 12 SMEs. Each section corresponds broadly to research questions two through to seven.

5.1 Internet access before Superfast Broadband (SFB)

The majority of the SMEs (11 out of 12) recognised that there was potential benefit to their business if a faster and more reliable Internet access was available to them compared with their previous ADSL technology based Internet access. Amongst this group of SMEs, a minority had acute operational problems. The remaining SMEs tolerated the speed and reliability available to them.

Examples of the acute problems cited by the SMEs were:

- Inability to send and receive emails with large attachments to customers and fellow workers.
- Inability to send statements of accounts to customers and delays in processing customer orders.
- Inability to exchange data or communicate with suppliers.

The acute problems experienced, or the behaviour of tolerating, did not relate to a specific industry.

5.2 Intentions and outlook of SMEs prior to getting SFB

The majority of the SMEs (eight out of 12) did not have a specific growth, innovation, or a combined strategy but were aware of the potential opportunities to do so.

The remaining minority of SMEs did have an espoused growth, innovation or combined innovation or growth strategies.

It is also relevant that three of the SMEs, including one without a distinct strategy, cited that the availability of SFB in Cornwall was the key factor in their decision to relocate their business in Cornwall, from Berkshire, Devon and Oxfordshire respectively.

5.3 Experience of acquiring and implementing SFB

Eight out of 12 of the SMEs experienced problems in acquiring and implementing SFB. Of these, five SMEs experienced significant issues of delay and communication, which were disruptive to their operations or plans. The remaining three, experienced minor problems that was resolved either by themselves or by BT³. These SMEs were from a diverse range of industries.

Seven of the 12 SMEs did not need external support to either acquire or implement SFB as access to the required skills and expertise was available internally. However, it was unclear whether the remaining five SMEs that are connected to SFB had internal expertise to acquire and connect to SFB.

³ The SMEs could not verify whether it was BT Retail, BT Wholesale, BT Openreach, or a third party ISP.

Finally, only two SMEs needed significant investment to upgrade their IT equipment. Both of these SMEs benefitted from available grants.

5.4 Perceived benefit of SFB by the SMEs

Seven of the SMEs claimed a combination of: improved productivity⁴, improved customer service and relationships, less travel time and costs, and the ability to employ more staff. A further two SMEs believed that SFB has enabled them to experiment with innovation in anticipation of future customer or market needs changing, for example, by developing web based services.

Four of the SMEs needed issues to be resolved to fully benefit from their SFB connection. The cited issues and needs were:

- financial investment (i.e. a grant to additional IT equipment was cited as their choice for the source of finance),
- the complexity of the process for applying for grants.
- more bandwidth/speed and a resilient back up connection; and
- connectivity to be available in all geographic areas of their business.

5.5 The affect of SFB on SME operations

Firstly, all twelve SMEs perceived improvements in productivity⁵ of between 10% and 20% based on their estimation and judgement.

Furthermore, all the SMEs were clear that these improvements were as part of a series of actions and initiatives that implementation of SFB was also part of, that led to lower operating costs through more efficiency.

The reasons given by the SMEs for their perceived improvement in productivity⁶ were the:

- ability to work concurrently,
- elimination of bottlenecks,

⁴ The definition of productivity was the SMEs view of productivity which varied from SME to SME.

⁵ The definition of productivity was the SMEs view of productivity which varied from SME to SME.

⁶ The definition of productivity was the SMEs view of productivity which varied from SME to SME.

- improvement in staff morale,
- ability to access information remotely,
- quicker access to and processing of information,
- ability to make productive use of 'dead' time,
- reduced travel time,
- remote diagnosis of operational equipment failure, and
- better communication internally and externally.

Secondly, the majority of the SMEs (eight out of 12) have either retained jobs or created new jobs in Cornwall. However, in the same manner as the perceived productivity improvements, all the SMEs made it clear that the jobs created were the cumulative result of a series of initiatives that implementation of SFB was part of.

The type and number of jobs created by the SMEs were:

- Business support (6 jobs)
- Commercial driving (70 non permanent contracts and one permanent contract),
- Finance, marketing and production (between 10 to 15 jobs),
- IT (35 jobs), and
- Legal (2 jobs).

5.6 The affect of SFB on key SME stakeholders

5.6.1 Customers

The majority of the SMEs (eight out of 12) claimed improved relationships with customers.

The reasons cited were the ability to:

- respond faster,
- communicate better through more interaction via video conferencing and other means of internet-based collaboration,
- reach and attract new customers through internet based communication and promotion, and
- provide new services.

5.6.2 Suppliers

There was a mixed outcome regarding the relationship with suppliers, i.e. four of the SMEs revealed improved relationships in the form of lower costs and improved services received; two stated that there was an improvement in services received but no change in the relationship; and six saw the potential for better relationships or better services.

5.6.3 Partners

Nine of the SMEs experienced no change or expressed that there was no need for collaborating. In respect of the remaining SMEs, two cited that they collaborated or networked via video conferencing, which enabled them to have more interaction with their customers and suppliers which reduced effort and cost. Additionally, one of the SME would collaborate more if there were a means to do so that takes up less time.

5.7 The SME's perception of future opportunities and importance of SFB

A significant number of the SMEs expressed that new markets and growth were enabled with moderate increases in costs. The other opportunity was the ability to experiment and innovate, for example, by trialling new products or services or new business processes.

5.8 The SME perception of support needed

The vast majority of the SMEs stated that they would value support from SCP. A number of themes emerged about the type and delivery methods of the required support.

In respect of the type of support required, the SMEs stated they would value support on gaining knowledge of how to use IT solutions and consultancy services of business improvement and further exploitation of SFB. This could take the form of webinars or on-site visits and would need to be delivered from trusted and credible sources.

A related statement from one of the SMEs was that they would value information that could be supplied at the time of SFB delivery to enable networking of computer equipment.

The SMEs that have received these types of support and delivery formats did value it.

There was also indication that a means of accessing and engaging the SMEs yet to adopt SFB would be beneficial to the aims of SCP. In relation to this aspect, the SMEs expressed the need to:

- Promote Cornwall as a centre of excellence for high tech industries alongside the already established Cornish brand,
- Enable grant funding to the ‘average’ non-innovative business, and
- Make the grant application process simpler.

In respect of BT⁷, the SMEs expressed the need for improved communication, accuracy of SFB availability dates, and better ownership of issues regarding the installation of SFB. This applied to the SMEs with a connection, (i.e. as the SMEs will be growing and will need further Internet access services) as well for the SMEs yet to adopt (please see section 5.9).

5.9 Perception of the SMEs without SFB or who have ceased use of SFB

One of the SMEs saw SFB as a tactical solution for gaining short-term publicity and has ceased their connection. The second SME was waiting to establish a connection, had experienced problems in doing so, and had a very negative view of BT.⁸

The opportunity presented to SCP from the view of the SME awaiting connection is to incorporate these perceptions within future communications and support material, building on the points raised in section 5.8, above.

⁷ The SMEs could not verify whether it was BT Retail, BT Wholesale, BT Openreach, or a third party ISP.

⁸ The SMEs could not verify whether it was BT Retail, BT Wholesale, BT Openreach, or a third party ISP.

6.0 Appendix – detailed analysis

6.1 The perception of the Internet connection before SFB

Analysis of the obtained data revealed two main themes: the type of connection, and the type of impact on business operations.

The first main theme regarding the type of connection was principally an ADSL connection with 11 out of the 12 SMEs stating that they previously had either one or two ADSL connections. One of the SMEs had a dial-up connection and the remaining two had ISDN connections. Of the 11 that had ADSL connections, three SMEs stated that they had two ADSL connections to achieve the required speed and resilience.

The theme of the type of connection had a sub theme - the speed of connection (i.e. bandwidth), which was revealed as ranging from one to eight megabits per second for download of data and upwards of 0.25 megabits per second for uploading of data.

In the second main theme regarding the impact on respective SME businesses, three of the SMEs had acute problems despite having invested in two ADSL connections.

The three SMEs expressing acute problems were from diverse industries, i.e. from the industries of specialised construction, meat wholesaling, and combined IT software development, and holiday accommodation. An example illustrating the acute problems is -

“Yes, before we had the superfast we had a broadband connection which was absolutely useless – I mean we’ve got a sales team of four at the moment and we’ve got the rest of the business all trying to work on a very slow broadband connection. In fact we had to double it up to two broadband connections to try and give us the bandwidth we needed because a lot of the work surveying we do in the line of our business is using Google Earth and stuff like that. And you get three or four guys in the office on Google Earth and trying to send an email and it just stopped. It was a complete waste of time.” SME 6 (2013),

A further sub theme, which accounted for six other of the SMEs, was that whilst knowing that the speed was limiting their operations, they either tolerated or managed with the available speed. These SMEs were also from a range of industries, i.e.: legal services, IT software

development, IT support services, transport and logistics services, and business support services.

An example to illustrate the typical feelings and attitudes of these SMEs is -

“ It was certainly tolerable. We didn’t move to the Superfast so early because of any problems really that we were experiencing. We moved really because strategically it is the right thing to do because it puts us on a better platform, it puts us on the next platform up. Whereas before we were working at the fastest we could on copper, we’re now working at the slowest we can on fibre knowing that we can go infinitely more.” SME 9 (2013).

6.1.1 Conclusion

The SMEs made best use ADSL technology and tolerated this where possible, for example by having additional connections to meet their needs.

Although a minority of the SMEs had acute problems and the majority of the SMEs tolerated speeds it was not possible to associate either of these situations to a particular type of industry.

6.2. The outlook of the SMEs at the outset of getting SFB.

The obtained data revealed two main themes and a number of sub themes under each main theme.

The first main theme was where SMEs had a distinct and clear strategy for their respective businesses and felt that SFB contributed to this. This accounted for six out of the 12 SMEs. The sub themes were the existence of a growth strategy or the existence of a combined growth and innovation strategy, which accounted for three of the SMEs.

Examples of the thoughts of the SMEs about SFB contributing to their business strategy are:

“The business strategy obviously is to grow the company” SME11 (2013).

“ No the broadband was a bonus. We would have implemented the business plan anyway, but it would have added costs” SME12 (2013).

“... we decided that the xxxx marketplace was changing, we were either left with two strategic choices; to expand and invest heavily with the offices we had and fill them – or shrink, or cease trading; but shrink was the

best option. This opportunity came up and we couldn't have done it if we hadn't upgraded to Superfast....."
SME13 (2013).

The second theme of not having an espoused or definite strategy for the remaining six SMEs revealed a larger variation of sub themes, as follows:

- Two SMEs had future growth of their business in mind,
- Two SMEs had enablement of innovation in mind,
- One SME was interested in their combined business and personal productivity and use respectively, and
- One SME wanted resilience.

It is also relevant that three of the SMEs, one without a distinct strategy, cited that the availability of SFB was the key decision to relocate their businesses to Cornwall from Berkshire, Devon and Oxfordshire respectively. An example to illustrate this is- “[Respondent] *Yeah fundamental's probably not a strong enough word, I can't put more emphasis on it, if it wasn't higher it was totally critical, it was one of the most key things we looked at before we even looked at a property. [Interviewer] So it influenced your choice of your location? [respondent] Absolutely, yeah 100%, yeah.*” SME8 (2013).

6.2.1 Conclusion

Some of the SMEs had a strategy and knew that SFB could help achieve it. However, the SMEs without a specific strategy were aware of the potential of SFB to contribute towards changing their business. In both cases, the SMEs were looking to grow their business, innovate, or build resilience.

While the SMEs recognised the contribution or potential contribution of SFB, they also recognised that SFB needed to be coupled with other business initiatives or investment to achieve growth or to innovate.

SFB has also played a fundamental part in a minority of the SMEs regarding the re-location of their businesses to Cornwall.

6.3 The experience of acquiring, implementing, and using SFB.

Analysis of the data revealed a number of themes and sub-themes. The first theme was whether the SMEs experienced problems or not.

The first sub theme was where four of the SMEs (who are in the horticultural, marketing, manufacturing industries, legal services, and IT software development industries respectively) claimed that there were no problems relating to: establishing connectivity, reliability, or the speed of SFB to date.

However, in contrast, second sub themes revealed that five of the SMEs experienced problems of delays of between three months to two years in establishing their connection. Furthermore, one of the SMEs experienced communication issues that created a very serious risk to the existence of their business. For example - *“ I said to them I want to change from standard broadband to Infinity. Will there be any interruption? No. Will you tell me when you’re coming? Yes. Could it be late in the day when everyone’s not working? Yes. What do they do? First thing in the morning, cut it off, didn’t tell us. A whole office full of people not doing anything. And it’s not just here. I know other businesses have had the same thing. I’ve got a mate of mine trying to sue them at the moment. They did it in my house. BT and Open Reach’s communication is shocking, and that is enough to put anyone off doing anything with superfast with BT.”* SME6 (2013).

The remaining SMEs (from the IT support, transport logistics, and business support industries respectively) experienced minor issues that were resolved either internally to the business or by BT.

The second main theme is whether the SMEs had access to the expertise to connect and make use of SFB.

Seven of the SMEs did not need external support to connect to SFB as they had access to the required skills and expertise, with only one of the SMEs trialling before implementation, i.e. *“ A lot of work from our end because we manage our own IT internally, we do everything ourselves...means that we can trial here in St Austell without the worry that the system's not going to handle it. We know the system will handle it”*. SME9 (2013).

However, it was unclear whether the remaining seven SMEs that are connected to SFB had internal expertise or not.

The third main theme was whether additional related investment was made by the SMEs to make use of SFB effectively. The data showed that two of the SMEs who were in the meat wholesaling and legal services industries, needed significant investment to upgrade their IT equipment, both of which benefitted from available grants. For example - “ *We’re increasing the cost in IT, though we’ve got to factor in the grant...., so we spent £15,000 of our money and £15,000 came from the grant I think or something like that.*” SME13 (2013).

6.3.1 Conclusion

A significant proportion (five out of 12) of the SMEs expressed a poor experience in the form of inadequate communication and long delays in their quest to acquire SFB, where one SME cited that there was a real threat to the operation of their business. The remaining SMEs either had no problems or minor problems.

The majority of the SMEs had access to the necessary skills and knowledge to acquire, install, and implement SFB, while a minority needed additional investment in IT equipment which was supported by grant funding.

There was no specific industry that either had positive or negative experiences in acquiring, installing and implementing SFB.

6.4 The SMEs perception of whether they are getting all the benefits of being connected to SFB

Two major themes arose from the analysing the available data.

The first major theme was whether the SMEs are getting the maximum perceived benefit.

The first sub theme of the first major theme was whether the SMEs are benefitting today. Seven of the SMEs claimed a combination of: improved productivity, improved customer service and relationships, less travel and the ability to employ more staff.

The second sub-theme, which cannot wholly be separated from the first sub-theme, was whether the SMEs saw a potential for future benefit. Two of the SMEs believed that SFB had enabled them to experiment with innovation immediately and gave the capability to respond to customers or market changes when the need arose.

These SMEs were in the marketing and legal services industries, who cited the following:

“Typically it’s been an industry that has been slow to take up on the web and use technology, but over the last 5 years or so it’s been very much more so. One thing I’ve looked at is how can we expand...” SME4 (2013).

“ We have trialled certain projects and internet based products and we've got some new ones in the pipeline coming up...” SME9 (2013).

The second major theme was where benefits were perceived but barriers existed from getting full benefit. Four of the SMEs were receiving some benefit but would need a number of matters resolved to yield full benefit, as follows:

- Using the complex process for applying for a grant to get IT equipment that is more suitable for the speeds offered by SFB (IT software development industry),
- Need for more speed (i.e. bandwidth) that is currently accessible (IT support industry).
- Need for the resilient backup to the SFB connection (legal services industry),
- Need all parts of its business connected to SFB (two of the SMEs in the business support and transport logistics industries).

6.4.1 Conclusion

The majority of the SMEs perceived that they were benefitting from SFB immediately or saw how they would benefit in the future, whilst a minority experienced barriers to getting the benefits possible.

6.5 The effects of getting connected and implementing SFB for the SMEs

Two major themes along with some sub-themes were revealed.

The first major theme was the extent of productivity improvements⁹. All SMEs cited productivity improvements¹⁰ of between 10% and 20% since connecting to SFB. Whilst this was the case, all of the SMEs also believed that SFB was part of a series of other actions and initiatives undertaken by them respectively that has led to lower operating costs.

The principle reasons cited for improved productivity were:

⁹ The definition of productivity was the SMEs view of productivity, which varied from SME to SME.

¹⁰ The definition of productivity was the SMEs view of productivity, which varied from SME to SME.

- Ability to work concurrently (5 SMEs)
- Elimination of bottlenecks (5 SMEs)
- Staff felt better as they could do more at the same time (4 SMEs).
- Ability to access information and thus work remotely (6 SMEs)
- Quicker access to and processing of information (4 SMEs)
- The ability to make productive use of previous 'dead' time. (6 SMEs)
- Reduced need to travel (7 SMEs)
- Remote diagnostics of operational equipment failure (2 SMEs)
- More effective communication internally or externally to the organisation (4 SMEs).

The second major theme under this heading was the change in employment arising for the SMEs since connecting to SFB. In the same manner as the first major theme under this heading, all of the SMEs believed that SFB was part of a series of other actions and initiatives undertaken by them, respectively, which led to the changes in employment.

The sub themes cited regarding changes in employment were as follows, reflecting the outcomes for eight out the 12 SMEs:

- jobs saved from being lost or staff knowledge retained through enabling flexible working (2 SMEs),
- Increase in staffing (5 SMEs). This was made up of:
 - Business support (6 jobs),
 - Driving (70 non permanent contracts and one permanent contract),
 - Finance, marketing and production (between 10 to 15 jobs),
 - IT (35 jobs), and
 - Legal (2 jobs).

6.5.1 Conclusion

All of the SMEs cited productivity improvements¹¹ of between 10% and 20% as part of a series of actions and initiatives including the implementation of SFB that have led to lower operating costs.

¹¹ The definition of productivity was the SMEs view of productivity, which varied from SME to SME.

Similarly, the majority of the SMEs (8 out of 14) had either retained jobs or created new jobs in Cornwall as an indirect result of adopting SFB. Between 123 and 128 jobs were created, of these between 53 and 58 were permanent.

6.6 The effects on relationships customers, suppliers and partners of the SMEs

Three major themes were revealed, relating to customers, suppliers and partners of SMEs, along with some sub themes.

The first major theme was the perceived change in customer relationships. The first sub-theme was the improvements cited by the SMEs, as follows, reflecting the outcomes for eight out of 12 SMEs:

- Ability to respond faster (9 SMEs),
- Ability to communicate better with customers through more interaction (10 SMEs),
- Ability to get more customers (6 SMEs);
- Ability to provide different services (8 SMEs);

Conversely, the second sub-theme was where the affect of customer relationships was uncertain or there was no change in the relationship. The findings were as follows:

- One of the SMEs was not sure of the impact on customer relationships, i.e.: *“I’m not really sure about customer service because obviously we don’t get any orders online at the moment.”* SME5 (2013).
- One of the SMEs claimed that there was no change in the relationship with its customers, i.e.: *“... repeat business, word of mouth. Very small place, Cornwall, everyone knows everyone...”* SME4 (2013).

The second major theme was the change in relationships with suppliers. This theme, in a similar way to the theme of the affect on relationships with customers, also had sub themes.

The first sub theme was where a minority (four out of 12) of the SMEs showed a positive change in relationships with their respective suppliers. A typical response - *“... now where we*

can go online, just log in and request brochures, we can buy online on a lot of sites now. I think before people were just doing it over the phone.”, “*At a wild guess 10% to 20% [of time]*” SME5 (2013).

The second sub theme was where six of the remaining SMEs saw the potential for changing relationships with their suppliers. A typical response - “*It certainly wouldn't do any harm. I very much feel it's a great tool and it's always best to have the best tool available for a job.*” SME2 (2013).

The third sub theme was where a minority of the SMEs (two out of 12) saw no change in relationships but received a better service from their respective suppliers.

The third major theme regarding relationships with partners revealed the following sub themes:

- One of the SMEs collaborated actively, i.e. “*I'd call it community really. It's about saying there is a digital community here. So we also do the 'xx xxx xxxx' conference which some would say is the best xxxx xxxxxxxx conference in the UK.*” (SME10, 2013).
- One of the SMEs was able to collaborate better, i.e.” *We still used to do it but the working relationship was very difficult and again the cost of development is coming down as a result of that.*’ (SME14, 2013).
- One of the SMEs would consider networking if this took up less time, i.e. “*It's the same thing about partners who are out there and what everyone's doing and just communicating; there's such a wealth of information thrown at you day-in and day-out and technology definitely encourages that, but trying to sift the wheat from the chaff in that is quite difficult.*”(SME4, 2013).
- Nine of the SMEs experienced no change or have no need to collaborate. A typical response - “*We don't really do it, really. We're kind of on our own. The meat trade is pretty much like that; it's a bit cut and thrust.*” (SME7, 2013).

6.6.1 Conclusion

The vast majority of the SMEs revealed that customer relationships had improved. They were able to get more customers and provide new products or services to their customers as an indirect effect of adopting SFB.

However, only a minority of the SMEs expressed that they had improved relationships with their suppliers, albeit that half the SMEs saw the potential to improve relationships with their suppliers.

Lastly, the vast majority of the SMEs expressed a view of not seeing a change or having a need to collaborate with other businesses. This represents a potential opportunity for SCP to inform the SMEs of the benefits of collaboration.

6.7 Opportunities brought about by SFB for the SMEs.

Two themes presented themselves, as follows:

- Access new markets without significant increase in costs (7 SMEs).

A typical response: “ One thing I’ve looked at is how can we expand, a lot of our clients tend to be some of the bigger corporates at the moment, so we’ve got two areas of the business and we either expand on that side which does mean face-to-face visits and things like that but that’s where technology can start to break some of those barriers down a bit as well. The other side is looking at Cornwall... we are B2B basically so our businesses are all over the country and increasingly overseas as well. We either start recruiting sales people out and about or we go for the more online approach which is you want 2,000 pens with your company name on it then we’ll put that as an online purchase basically, so it means we’re moving more and more online because that way you can run that company from Cornwall, we don’t need to have sales staff up and down the country, and it turns into more of a web-based marketing company rather than a...” SME4 (2013).

- Enabling innovation and experimenting (2 SMEs). A typical response:

“[Interviewer] So you say ‘here’s an idea, we can do this’ and they come back and say ‘okay that’s good, but can you change this?’ That kind of thing? [Respondent] Yeah.” SM5 (2013).

6.7.1 Conclusion

The vast majority of the SMEs believed that the adoption of SFB has brought opportunities to them. Seven of the SMEs cited that new markets were accessed without significant increase in costs. Additionally, two of the SMEs cited that SFB enabled innovation.

6.8 SFB’s role in the future of the SMEs

Half of the SMEs saw SFB as playing an essential role in the future of the business. Typical responses:

“[Interviewer] So looking to your future business, then, you think it’s absolutely... instead of the beginning it’s absolutely essential now? [Respondent] Yeah” SME7 (2013).

“ Yeah like I say, the easiest phrase to say is ‘it’s critical’, without it we wouldn’t be able to run our businesses for a long sustained time, and wouldn’t have considered doing it.” SME8 (2013).

“We’d gone up by those, and we’re looking to the future whereas 6/8 months ago we were being worried about the future.” SME13 (2013).

The remaining SMEs did not express the significance of SFB to their future in clear terms.

In conclusion, a significant number of the SMEs were dependant on SFB for their future. Additionally, given that either a majority or all of the SMEs had indicated that there was a combined positive impact on operations, customer relations, and enablement of growth and innovation, it was possible to deduce that even the SMEs that did not expressly state the significance of SFB clearly also had a high dependence on SFB for their future.

6.9 Support needed by the SMEs in the future

The vast majority of the SMEs believed that the SCP and BT¹² could play a role in enabling or maximising the benefit of SFB to them, based on their experience. The following sub themes were cited by the SMEs:

- The need for better instructions regarding networking computers (1 SME)
- Training and information regarding IT solutions (2 SMEs)
- Improved customer communications and customer service, i.e. from BT¹³ (2 SMEs)
- Need for technology or business consultancy (5 SMEs)
- Better access or support to grant funding (2 SMEs)
- Promotion of Cornwall as a centre of excellence for high-tech business and the Cornish brand (1 SME)

¹² The SMEs could not verify whether it was BT Retail, BT Wholesale, BT Openreach, or a third party ISP.

¹³ The SMEs could not verify whether it was BT Retail, BT Wholesale, BT Openreach, or a third party ISP.

The methods by which this support could be delivered varied from SME to SME, i.e. from electronic delivery such as email, webinars, and to on-site visits. The overall theme was that the information needed to be relevant and be from a trusted source.

Another theme cited by one SME was the need to engage the SMEs that have not yet connected to SFB as this would aid SCP's aim.

Furthermore, the finding regarding partnering and collaboration also revealed an opportunity for SCP to promote and/or provide support (either directly or indirectly) to the SMEs regarding partnering (please see 6.6.1, above).

6.10 Themes identified from the SMEs that have either ceased their SFB connection or are yet to connect

A clear strategy by the SME who had ceased SFB connection was to achieve free publicity provided by SCP. This SME did not intend to grow its business and saw no benefits for improving relationships with customers, suppliers or partners.

The second SME, who has yet to gain SFB connectivity, believed the barrier to connectivity was their perception of BT's brand image. Whilst this was the case this SME believed that there was benefit in gaining SFB and improving relationships with suppliers. Furthermore, this SME believed that support for IT solutions in the form of training and information would be valuable.

The perception of the second SME regarding the image of BT¹⁴ is relevant to the communication and promotion of Cornwall mentioned by another SME as well as the potential for SCP in engaging the SMEs that are not yet connected to SFB. (please see 6.9, above)

¹⁴ The SME could not verify whether it was BT Retail, BT Wholesale, BT Openreach, or a third party ISP.