



Department for
Business, Energy
& Industrial Strategy

Evaluation of the Small Business Leadership Programme

Phase 2 Report

October 2022



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1. Executive Summary

Programme background

The Small Business Leadership Programme (SBLP) was a business support programme available to SMEs in England directed at leaders (i.e. key decision makers) within the businesses. Initially conceived as a productivity improvement programme, it was adjusted to address the effects of the pandemic. Starting in August 2020, SBLP provided training to business leaders to help them enhance business resilience and recover from the impact of COVID-19 as well as providing them with the tools and knowledge needed to improve the productivity and grow their businesses. The programme delivered the course to approximately 125 cohorts of 15-25 SME leaders (involving 3,005 participants in total) between November 2020 and June 2021.

The programme intervention logic was based on three steps: (i) improving the management and leadership skills of SME leaders with the expectation that this (ii) would lead to changes in management and leadership practices within their business, with these changes (iii) improving the resilience of SMEs during the pandemic and ultimately improving productivity. Despite the necessity of switching to virtual delivery, the programme also aimed to stimulate the creation of sustainable peer networks and embed a culture of learning within participating SMEs.

Delivery of the programme coincided with national lockdowns in November 2020 and January 2021, meaning that the programme operated in unique circumstances, and meant that both course content and delivery mechanisms needed to be flexible to cater for an ever-changing social and economic context.

The ten-week SBLP course (eight weeks of curriculum delivery plus two one-week breaks) was provided at no cost to participants and consisted of three elements: online masterclasses, facilitated peer learning groups, and independent learning exercises.

Evaluation scope

The Department for Business, Energy and Industrial Strategy (BEIS) appointed Technopolis to undertake an evaluation of its Small Business Leadership Programme (SBLP). The evaluation had four aims, as specified in the terms of reference:

- To understand how SBLP is being delivered in practice and to understand how to improve delivery (process evaluation)
- To understand and measure the early impacts of SBLP in terms of the adoption of new practices (early impact evaluation)
- To generate evidence to inform future programme design and funding decisions (strategic question)
- To embed the right data collection practices to enable a separate longer-term impact evaluation to be conducted in the future (impact evaluation)

This evaluation took place in two phases. Phase 1 collected baseline data about programme participants and provided a process evaluation. Phase 2 of the evaluation, the subject of this report, provided an early impact evaluation for SBLP.

The evaluation addressed five high level research questions:

Table 1: SBLP evaluation high level research questions (HLQs)

Phase 1 research questions	Phase 2 research questions
<p>Process evaluation</p> <ul style="list-style-type: none"> HLQ1: How effective is the SBLP in recruiting businesses and ensuring they complete the programme HLQ2: Is the SBLP successfully delivering high quality business support? <p>Early impact evaluation</p> <ul style="list-style-type: none"> HLQ3: How effective is the SBLP at encouraging SMEs to adopt new practices? 	<p>Early impact evaluation</p> <ul style="list-style-type: none"> HLQ3: How effective is the SBLP at encouraging SMEs to adopt new practices? HLQ4: What early changes are businesses making after participation in the programme? HLQ5: What other factors influence how and what changes businesses are making after they complete the programme?

Findings concerning HLQ1 and HLQ2, and early evidence concerning HLQ3 were provided in the Phase 1 Report (Appendix G). This Phase 2 report provides full findings for HLQ3, as well as for HLQ4 and HLQ5.

Research methodology

The impact evaluation used a variety of research methods to determine changes in participant behaviour, business practices and performance six months after completing the SBLP training programme. This report draws on three main research methods:

Table 2: Summary of research methods adopted

Method	Further details
Business surveys	<p>Four surveys:</p> <ul style="list-style-type: none"> Participant telephone survey: 6-month post-SBLP completion (x 120) Participant online survey for those with no diagnostic data: 6-month post-SBLP completion (142 responses) Telephone survey of programme 'drop-outs': six months after scheduled SBLP completion date (x100) Matched control group telephone survey (x100)

Business interviews	<ul style="list-style-type: none"> • Interviews with 34 businesses that opted-in to follow-up interviews during the participant 6-month post-SBLP completion survey.
Econometric analysis	<ul style="list-style-type: none"> • Undertaken using a combination of diagnostic data provided by participants when joining SBLP and telephone survey data from participants and the matched control group • Examined actions taken to deal with pandemic and to improve the business and proxy indicators for potential productivity effects • Matched control group identified from FAME business database using propensity score matching (PSM) • Second control group of SBLP drop-outs was also planned. However, analysis showed statistically significant differences between the treatment group of SBLP participants and drop-outs, therefore econometric analysis of second control is excluded from report

Research conclusions

HLQ3: How effective is SBLP at encouraging SMEs to adopt new practices

In assessing this HLQ, we examined how SBLP had shaped behaviours, skills and capabilities at the individual level. We assessed changes against specific practices that are known to correlate with higher labour productivity, as well as changes against management skills in a more general sense.

For about half the participants, SBLP appears to have helped improve management skills and capabilities. For those that have reported improvements in this area, they have tended to centre on having an improved ability to lead their business and employees; improved overall confidence which has translated into taking more calculated risks with the business; and the gaining of new or refreshed knowledge in areas particularly associated with finance, marketing, and strategic planning.

While it is clear that programme participation has played an important role in improving participants' general business and management skills, the programme has seen more mixed results in encouraging changes to a group of specific management practices (e.g. the number of key performance indicators monitored, the number of managers having performance reviews, and how individuals deal with problems in service provision) that have been shown to correlate higher labour productivity. There was a relatively even split of participants who indicated that they had made these types of changes and those who had not. Furthermore, the econometric analysis found no statistically significant difference in improvement in these management practices between the control and treatment groups.

SBLP has not been particularly effective in encouraging SME leaders to develop and maintain networks with other participants. Virtual delivery of the programme was a key factor in this as it was less conducive to the development of deep and long-lasting personal relationships.

HLQ4: What early changes are businesses making after participation in the programme?

In assessing this HLQ, we examined how far SBLP participation could be linked to changes at the level of business i.e. we examined whether any individual level changes in management skills and capabilities (as assessed in HLQ3) had translated into changes in the businesses they helped manage.

A total of 84% of SBLP participant survey respondents reported that they had taken actions in the six months after participation to support business recovery from the effects of the pandemic that differed to the specific management practices outlined in HLQ 3. Commonly reported actions included:

- Undertaking a strategic review of existing operations (e.g. re-visiting existing business models, devising new growth strategies, and restructuring the business)
- Diversifying products, services and customers
- Investing in technology
- Changing their approach to marketing or branding

Self-reported survey evidence suggests that SBLP had some effect in enabling these changes. The econometric analysis also suggests a strong and highly statistically significant effect, with the treatment group being more likely than the control group to have taken actions over the last six months to deal with or recover from the pandemic.

Additionally, 98% of surveyed SBLP participants had made or were planning to make changes to improve productivity or grow their business. Indeed 86% had made changes already. Commonly reported actions included:

- Making strategic changes to the business (e.g. restructuring business models, streamlining processes, and implementing monitoring systems)
- Recruiting new staff
- Investing in technology
- Changing human resources approaches (e.g. leadership training for colleagues, employee wellbeing and incentives)

Again, both the survey evidence and econometric analysis indicates that SBLP had a role enabling these changes. The econometric analysis shows a strong and highly statistically significant effect in relation to the treatment group being more likely than the control group to have taken actions to improve productivity.

Most of the measurable changes in business performance expected to result from the actions already taken will take some time to occur and will be addressed in a later impact evaluation. This study has nevertheless investigated potential effects on business performance through the survey and participant interviews.

At this stage, it does not appear that SBLP participation has had any significant effects on the ability of their business to survive the pandemic. While some businesses felt SBLP gave them

useful tools to help run their business better during the pandemic, this has not tended to translate into a view that the programme has been the main factor in business survival.

The econometric analysis suggests that there has been some growth in employment among SBLP participants compared to the control group within the context of the pandemic and use of the Coronavirus Job Retention Scheme by more than two-thirds of beneficiary respondents. However the effects in the longer-term remain to be seen.

Beneficiaries also seem uncertain whether SBLP participation will have a meaningful effect on their longer-term future business performance. By and large, they see the knowledge gained as a useful bank they can draw on in the future to deal with issues as they arise. Nevertheless, our econometric analysis shows that relative to a control group, beneficiaries are more confident about their business' growth potential going forward from now.

HLQ5: What other factors influence how and what changes businesses are making after they complete the programme?

This evaluation addressed this question in two ways: in terms of participants' views on the barriers to implementing changes, and in terms of other forms of support that may have contributed to the changes made.

Looking firstly at barriers to implementing changes, a lack of time was the most commonly identified factor. Participants tended to say they had insufficient capacity to work through and implement the ideas and concepts they learnt through SBLP. The pandemic particularly exacerbated these time constraints – staff shortages (first because of furlough, and then because of isolation requirements) meant that SME leaders had to spend more time being involved in day-to-day operations of their business rather than focusing on longer-term business improvement.

Looking at the use of other forms of support, it is clear that many participants used other forms of business support either before, during, or after their SBLP participation. Participants tended to find these alternatives useful and helpful. The Coronavirus Job Retention Scheme (commonly known as the 'furlough scheme') was the most commonly used, but its use was not statistically significantly different between (surveyed) participants and the control group. In other words, any differences in outcomes between participants and the control group will not have been due to participants also using the furlough scheme.

Participants have also highlighted how they used other business support schemes including included Bounce Back Loans and local authority grants but, as for the Coronavirus Job Retention Scheme, these focused more on cashflow rather than improving management capabilities as per SBLP. To that end, it is plausible that any changes to business management practices in the last six months are more likely to be attributable to SBLP than other support schemes.¹

¹ We do recognise that cashflow-focused schemes such as those described may have provided the means to implement changes learned via SBLP

2. Introduction

Background

The Department for Business, Energy and Industrial Strategy (BEIS) appointed Technopolis to undertake an evaluation of its Small Business Leadership Programme (SBLP). The evaluation had four aims, as specified in the terms of reference:

- To understand how SBLP is being delivered in practice and to understand how to improve delivery (process evaluation)
- To understand and measure the early impacts of SBLP in terms of the adoption of new practices (early impact evaluation)
- To generate evidence to inform future programme design and funding decisions (strategic question)
- To embed the right data collection practices to enable a separate longer-term impact evaluation to be conducted in the future (impact evaluation)

This evaluation has taken place in two phases. Phase 1 collected baseline data for programme participants and provided a process evaluation for the programme. Phase 2 of the evaluation, the subject of this report, provides an early impact evaluation for SBLP, with a particular focus on programme participants.

The evaluation itself has high level research questions as outlined in Table 3 (with HLQ3 being addressed in both phases of the study).

Table 3: SBLP evaluation high level research questions (HLQs)

Phase 1 research questions	Phase 2 research questions
<p>Process evaluation</p> <ul style="list-style-type: none"> • HLQ1: How effective is the SBLP in recruiting businesses and ensuring they complete the programme • HLQ2: Is the SBLP successfully delivering high quality business support? <p>Early impact evaluation</p> <ul style="list-style-type: none"> • HLQ3: How effective is the SBLP at encouraging SMEs to adopt new practices? 	<p>Early impact evaluation</p> <ul style="list-style-type: none"> • HLQ3: How effective is the SBLP at encouraging SMEs to adopt new practices? • HLQ4: What early changes are businesses making after participation in the programme? • HLQ5: What other factors influence how and what changes businesses are making after they complete the programme?

This report presents our findings from Phase 2 of the evaluation, looking to determine the early impact that the programme has had on business behaviour and performance, as well as the level of additionality that SBLP has provided.

The report examines the following areas:

- **Chapter 1** (this section) introduces the study and the methodology used provides an overview of the programme
- **Chapter 2** examines how far SBLP has led to **changes in participants' management and leadership skills and capabilities**
- **Chapter 3** looks at the **changes made by businesses** drawing on any changes in skills and capabilities identified in the previous chapter
- **Chapter 4** looks at whether there have been any **early observable effects on business performance** as a result of business changes made
- **Chapter 5** considers **programme attribution** to the effects observed throughout the study
- **Chapter 6** provides a **summary and recommendations** from the study
- **Appendices A-D** provide further background details and analysis from the econometric analysis
- **Appendix E** is the **Phase 1 Report**.

Programme overview

SBLP was a business support programme available to SMEs in England directed at leaders (i.e. key decision makers) within the businesses. Starting in August 2020 and ending in June 2021, it worked with approximately 3,000 business leaders to help them enhance business resilience and recovery from the impact of COVID-19 as well as providing them with the tools and knowledge needed to improve the productivity and grow their businesses. Delivery of the programme coincided with national lockdowns in November 2020 and January 2021, meaning that the programme operated in unique circumstances, and meant that both course content and delivery mechanisms needed to be flexible to cater for an ever-changing social and economic context.

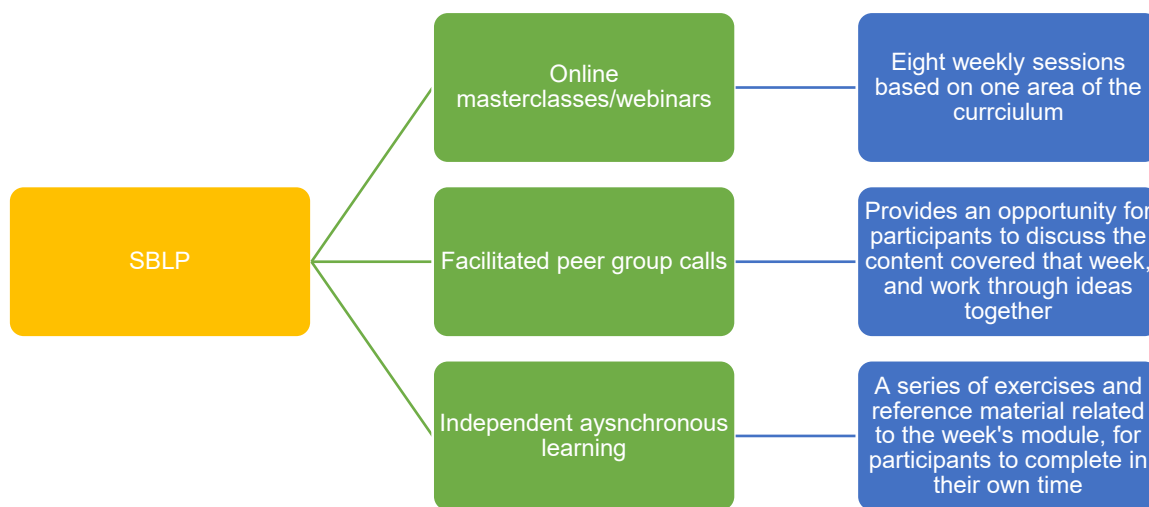
The ten-week SBLP course (eight weeks of curriculum delivery plus two one-week breaks) was provided at no cost to participants and consisted of three elements as illustrated in Figure 1: online masterclasses, facilitated peer learning groups and independent learning exercises. The course covered eight business-focused modules with each delivered as a 1.5 hour masterclass, facilitated peer-learning in small groups and additional independent learning activities accessible via an online platform. The eight modules were:

- Module 1: Overview – Productivity, Resilience, Sustainability
- Module 2: Innovation and Markets
- Module 3: Leadership and Employee Engagement
- Module 4: Vision, Brand and Purpose
- Module 5: Your Customers, Segmentation, Target & Positioning
- Module 6: Operational Efficiency

- Module 7: Finance and Financial Management
- Module 8: Action Planning and Implementation

The Chartered Association of Business Schools (CABS) was contracted by BEIS to deliver SBLP. A consortium of 20 business schools, all of whom hold CABS' Small Business Charter accreditation, delivered the courses, with a sub-set involved in designing the curriculum. The programme was designed to offer consistent content, delivery style and quality, while giving the individual business schools some scope to tailor materials and content to cater for the needs of their audience.

Figure 1: Summary of programme delivery model



Source: Technopolis

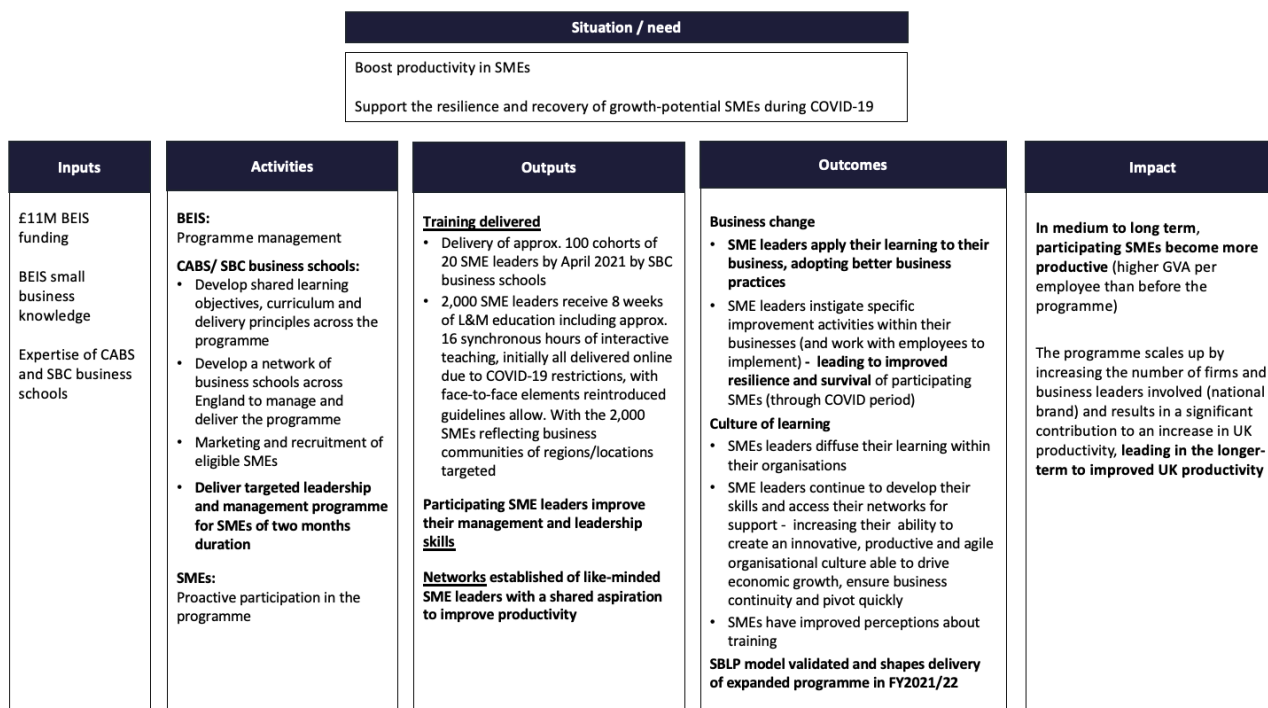
The programme delivered the course to approximately 125 cohorts of 15-25 SME leaders (involving approximately 3,000 participants in total) between November 2020 and June 2021. The programme adopted an open recruitment strategy, seeking to reach businesses across the country. SBLP ran a national publicity campaign to attract participants and this was the main approach to recruitment. Particular successes came from local radio campaigns, and articles in trade association communications. Participating business schools topped up these recruits by working with their existing contacts and networks, most notably Local Enterprise Partnerships (LEPs) and Chambers of Commerce. Any business leader that met the SBLP eligibility criteria² could apply to the programme, with the delivery partners looking to enrol any individual that applied. SBLP exceeded its original target of recruiting 2,000 participants by March 2021, adding additional cohorts in April to June 2021 to cater for the additional demand. Much of this success was due to the national publicity campaign, including marketing emails and social media

The logic model (Figure 2) sets out the intended outcomes and impacts for the programme. As shown, the programme's emphasis was threefold: i) to improve the management and

² There were three main criteria: i) the participant's business needed to be an SME based in England, ii) the business needed to employ 5 to 249 people and have been operational for at least one year, and iii) the participant needed to be a decision maker or member of the senior management team within the business and have at least one person reporting directly to them.

leadership skills of SME leaders; ii) for this to translate into changes in personal behaviour and in the management and leadership practices in their business; and iii) for this in turn to lead to improved resilience for the SMEs during COVID and a culture of learning, ultimately lead to improved business productivity and performance. There was also the intention that the programme would prove itself to be successful and, as a result, be scaled up to reach larger numbers of SMEs.

Figure 2: SBLP logic model



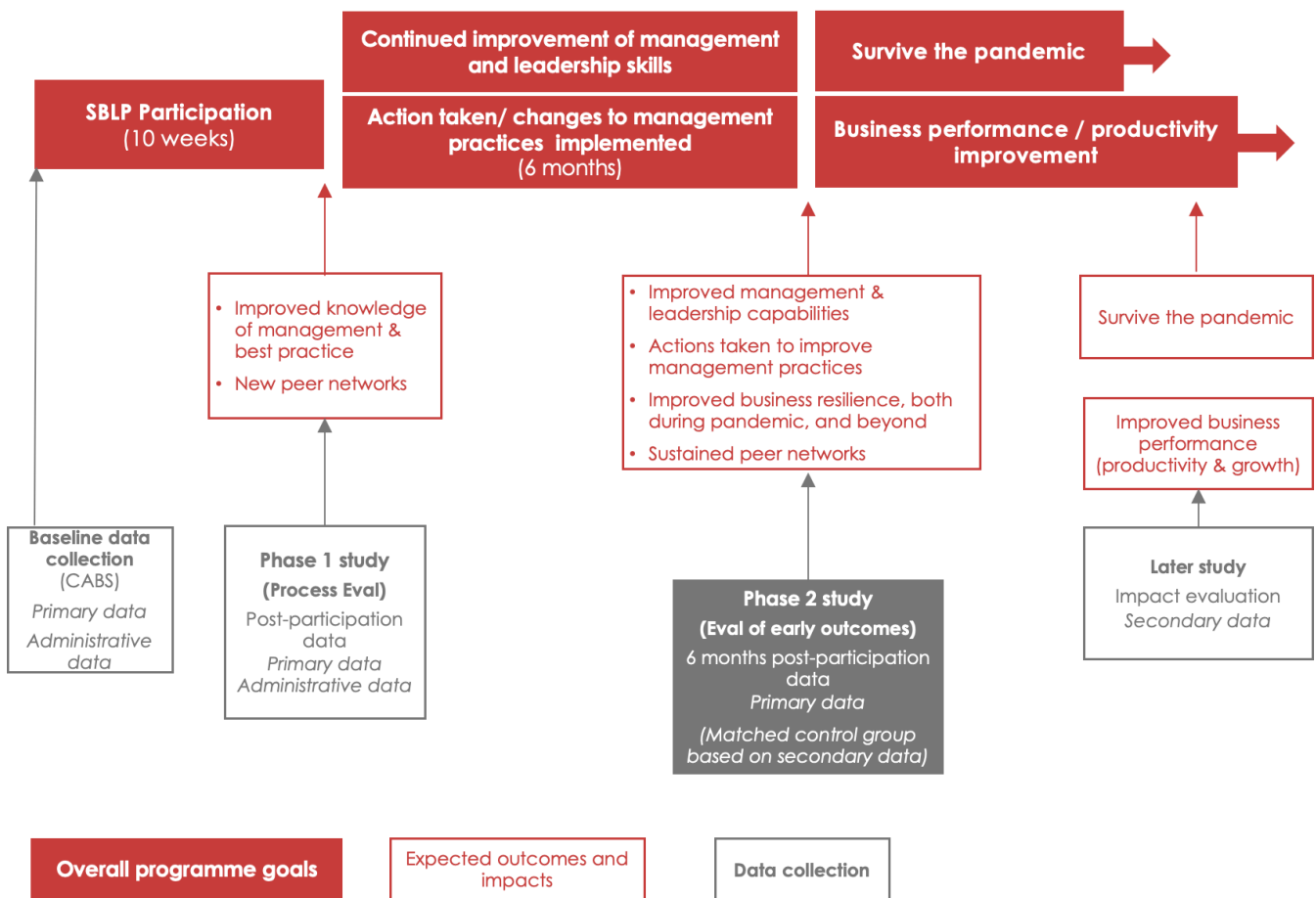
Source: Technopolis version of CABS and BEIS drafts

Evaluation methodology

This report draws on a mixed methods approach which combines econometric analysis of survey data (primary research) and programme administrative data, as well as qualitative primary research with programme participants and beneficiaries. This report also builds on analysis undertaken as part of the Phase 1 report (included in Appendix E).

As shown in Figure 3, we conducted initial analysis as part of the Phase 1 study into early signs of programme participation translating into the implementation of new behaviours and business practices. Phase 2 involved studying changes made by participants in the six months after completing the programme. To do this, we have drawn on baseline data collected via primary and administrative data collected at the start of the programme, as well as qualitative and quantitative data collected as part of this Phase 2 study.

Figure 3: Data collection timescale for the evaluation



Below, we set out the main research tasks involved in compiling this report.

Business surveys

We conducted surveys of four groups of businesses timed to take place six months after SBLP participants had completed the programme, to capture evidence on changes to personal management and leadership skills and on actual and planned changes to management behaviours and practices.

We conducted four different business surveys as follows:

Beneficiaries with diagnostic data (treatment group)

Data on business leaders' skills and the performance of their businesses was collected for each participant just before the start of the SBLP course ('diagnostic data'). This data was intended to provide the baseline (or pre-treatment assessment) for the evaluation. However, this data was not collected for all SBLP participants (owing to a repurposed diagnostic data form for this evaluation only being implemented mid-way through SBLP, and even then, only by some business schools) or was not available in a usable format (most notably missing or

incorrectly stated unique identifiers. Usable diagnostic data was available for 570 participants that had completed the programme (the beneficiaries).³

Our statistical power calculations estimated that the minimum sample size of 27 to 87 observations for the treatment group (coming from the 570 participants with usable diagnostic data) was needed to support a robust evaluation and a robust econometric analysis. Given the practicalities of securing survey responses (i.e. likely response rates) from the beneficiaries in this group, we agreed with BEIS on a target of securing 120 survey responses. This was successfully achieved via a telephone survey. The survey replicated questions in the diagnostic survey, asking respondents to self-assess their management and leadership skills and capabilities, as well as obtaining information on management practices,⁴ actions taken to date and any changes planned. The survey also contained some questions examining the business' possible performance trajectory, and the extent to which SBLP participation was responsible for any of the changes seen in the respondent's business.

Beneficiaries with no diagnostic data

For 1,253 programme beneficiaries, no usable diagnostic data was available. An online survey was sent to these beneficiaries with a similar set of questions to those asked to the beneficiaries with diagnostic data. Again, questions focused on their management and leadership skills and capabilities and their management practices and actions taken or planned. However, as well as capturing their position at the point of the survey, they were also asked to provide data on their position prior to joining SBLP, thereby capturing a baseline data retrospectively. The survey also captured evidence on the contribution that SBLP made to any changes seen.

A total of 142 responded to the survey, a response rate of 11%, a lower figure than might typically be expected. We have not included data from this survey in the econometric analysis, believing that our analysis would be less robust if using baseline data derived from different methods, at different times, and using differently phrased questions. However, we deemed the survey questions and approaches for the diagnostic and non-diagnostic groups to be sufficiently similar to allow answers to be combined for basic descriptive statistics. For that reason, for some metrics, we have combined the data with that from beneficiaries with diagnostic data survey to help understand how behaviours and capabilities may have changed in the months after completion of SBLP.

SBLP drop-outs

According to programme monitoring data, 296 out of 3,005 participants did not complete the SBLP course (the 'drop-outs'). These were surveyed via telephone, at a point that six months after the date they would have completed the course, to capture data on their management

³ Completing the course was defined by CABS as completing at least six of the eight modules

⁴ Management practices were based on a sub-set of questions from the ONS Management and Expectations Survey (MES). The questions address management practices that have been shown to correlate with labour productivity

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/experimentaldataonthemanagementpracticesofmanufacturingbusinessesingreatbritain/experimentalestimatesfor2015>.

Questions were selected from MES from following discussions with academic experts and the client group. The selection aimed to capture parameters within four key focus areas of MES. While the MES key focus areas are unlikely to cover all dimensions of productivity-enhancing management practices, we selected the ones best aligned with the SBLP theory of change and used a reduced set to keep the survey as short as possible in order to achieve sufficient response rates. Furthermore, MES is being used in evaluations of other business support programmes, which would enable future comparison with SBLP results.

and leadership skills and capabilities and their management practices and actions taken or planned.

Of the 296, 53 had usable diagnostic data. For the remainder, we used a slightly different survey that included additional questions asking the respondents to provide thoughts on their capabilities and behaviours before joining SBLP. The drop-out group was one of two groups used as control groups to help understand the counterfactual, assessing how differently businesses and individuals may have changed over time relative to the treatment group.

Our power calculations again suggested a minimum sample size of 27 to 87 observations for drop-outs. With response rates expected to be lower than for beneficiaries, we agreed a target of 100 survey responses with SBLP drop-outs. We successfully met this target, with 21 respondents being from the group with existing baseline data from the diagnostic survey, and 79 from whom we collected baseline data via telephone survey.

Matched control group

Our methodology also involved use of a second control group - a matched group of businesses similar to those receiving programme support but who were unconnected to SBLP. We constructed the matched control group through propensity score matching (PSM). This involves comparing units (businesses in this case) that, based on observables, had very similar probabilities of being treated, even though some ultimately will have received treatment while others will have missed out. If two units have a similar probability of being treated, then they have similar propensity scores, and all remaining variation in treatment assignment is due to chance. We reached this treatment probability (the propensity score) through probit regression⁵ (See Appendix A), with the treatment probability depending on a set of baseline characteristics of the beneficiary group. Where we found firms in FAME with a propensity score between 0.1 and 0.9, we selected them for the matched control group.

Data was captured for this control group via a telephone survey. To maximise response rates from this group, the survey was kept as short as practicable and focused on management practices and any recent changes made to the business (therefore it did not include the self-assessment of management and leadership skills and capabilities). The survey also asked respondents about their management practices in October 2020, when SBLP delivery commenced, with this information serving as baseline data for each respondent.

Again, our power calculations suggested a minimum sample size of 27 to 87 observations from this group. Given the expected difficulties of securing survey responses with those unconnected to the programme, we agreed and successfully achieved a target of 100 from this group.

Beneficiary interviews

The primary data collection exercises above (via survey) are focused largely on collecting quantitative data. To collect qualitative data on beneficiaries' experiences of the programme, and the extent to which they felt it helped them, we conducted a number of 15-20 minute semi-structured interviews with beneficiaries that opted in to a follow-up discussion in their survey responses. These interviews focused on respondents' views on the knowledge and skills they gained through the programme, where they and their business would be now in the absence of

⁵ A form of regression where the dependent variable can only take only value, here either belonging to the SBLP sample, or belonging to the FAME sample. Appendix A provides further detail.

SBLP and exploring the extent to which they had developed networks or contacts through the programme.

Against an original target of 40 interviews, we were able to conduct 34, an 85% success rate. We encountered some problems in securing interviews in part due to 'survey fatigue', but also because business leaders were especially busy during the interview period (October to December 2021) due to a combination of post-lockdown staff shortages and the run up to the Christmas period. Nevertheless, the interview evidence captured provides a detailed evidence base for qualitative assessment. The interviews have also formed the basis for the mini case studies that appear throughout the report.

Econometric analysis

To assess SBLP's contribution against a variety of different outcomes, we compared the outcomes of the SBLP beneficiary group to two control groups: a matched control group with firms identified through the commercial database FAME; and a second control group, derived from SBLP drop-outs.

Matched control group

Using results from the beneficiary impact survey and the matched control group survey, we used a nearest-neighbour matching strategy to find the units (firms) to focus our analysis on. Nearest-neighbour matching involved finding a small number of units with comparable propensity scores from the control group and averaging their outcomes to assign it as an imputation⁶ to the original treated unit for the hypothetical scenario that the treated unit had been untreated. In this report, we have matched each treatment unit with the five nearest neighbours from the control group. From this, we have derived the average treatment effect (ATE) by measuring the difference in mean outcomes between comparable control and treatment (beneficiary) units. Appendix A describes the approach used in more detail.

To ensure the validity of our identification strategy, in Appendix B we present balance tests showing the balance across various baseline characteristics between the treatment and control groups on our final matched samples. The balance tests support the validity of our analysis, showing that there were no independent or joint statistically significant differences across various pre-treatment characteristics.

Drop-out control group

We also replicated the same ATE assessment, this time using the drop-outs as the control group and the basis for nearest-neighbour matching. We also subjected the drop-out control groups to balance tests (see Appendix D) but found some notable imbalances between the drop-out control group and the treatment group of beneficiaries. It is also possible that the drop-out control group may have had some unobserved imbalances too. For instance, those who dropped out might inherently have been less motivated to make changes to their business, or their business might not have had as favourable future prospects. Conversely, it is also possible that firms could have dropped out as their business was improving to the extent that they had less need for a business support programme. While we present our econometric analysis using the drop-outs as a control in Appendix C, the level of imbalance means that we have not considered the results as part of our analysis (albeit as shown in Appendix C, the results do align with those presented in the comparison with the matched control group).

⁶ This is the process of replacing missing data with substituted values

Limitations in evidence

We have collected sufficient evidence during the study to enable us to make credible assertions about the outcomes and impacts generated by SBLP. Nevertheless, the evidence base does have some limitations which should be considered when interpreting the study's findings:

Firstly, as noted earlier, there were issues in collecting usable diagnostic data for the evaluation. The diagnostic tool changed mid-way through the programme, with earlier cohorts not providing relevant data for evaluation purposes. Furthermore, data quality regarding SME participants was variable between different business schools – some provided lots of data with relevant unique identifiers while others did not. Consequently, our treatment group sample lacked representation from earlier cohorts, and some business schools. However, our results remain credible because while there was some flexibility amongst business schools to tailor elements of course delivery (e.g. when sessions were held each week, and the use of local examples in case studies), the SBLP experience was largely consistent across business schools and across cohorts. However, any potential variability of the SMEs across the cohorts was not known.

Secondly, owing to imbalances in the baseline characteristics for the drop-out survey and treatment group telephone surveys, we disregarded an econometric analysis that used the drop-outs as a control. This does not adversely affect the credibility of our results. We have used a second control group, a matched comparison group, which does not have these imbalances, and we triangulated our findings with qualitative evidence. Furthermore, while we disregarded the analysis of drop-outs, as shown in Appendix C, the results do still align with those for the matched comparison group, thereby supporting our findings.

Thirdly, the fact that participants could self-select into the programme may mean that there are unobserved differences between participants and those in the matched comparison group. For instance, the programme may have attracted those that were already looking to make changes to improve their business, while the control group could potentially have had lower levels of business leaders predisposed to changing their business. Business leaders may also have self-selected onto the programme because they were confident in their firm's longer-term viability, while the matched comparison group business leaders may not have enrolled because they thought there was less chance of business survival anyway. The effect of the pandemic may have increased the likelihood of certain types of businesses joining the programme (e.g. those using the 'furlough scheme' with more time to participate in the programme). However (as shown in Table 14) there was little difference between SBLP participants and the comparison group in the use of the furlough scheme. There may, of course, be other unobserved differences that have not been controlled for.

Finally, we were unable to meet our target beneficiary interviews. Nevertheless, with an 85% success rate and 34 interviews, this still represents a sizeable evidence base. We have also triangulated the findings with statistical analysis to help ensure that the findings from the interviews are credible.

3. Changes in personal management and leadership skills and capabilities

As presented in the programme logic model, a key intended output of SBLP is the improvement in the management and leadership skills of beneficiaries. The Phase 1 report Appendix E) provided some evidence in this regard, suggesting that programme participation had helped some beneficiaries become more confident about managing their business, as well as providing new knowledge on different ways of managing staff, marketing and financial planning. The data gathered six-months later re-visits the issue of SME leaders' self-assessment of their improved skills and also addresses their networking behaviours and attitudes to training and learning.

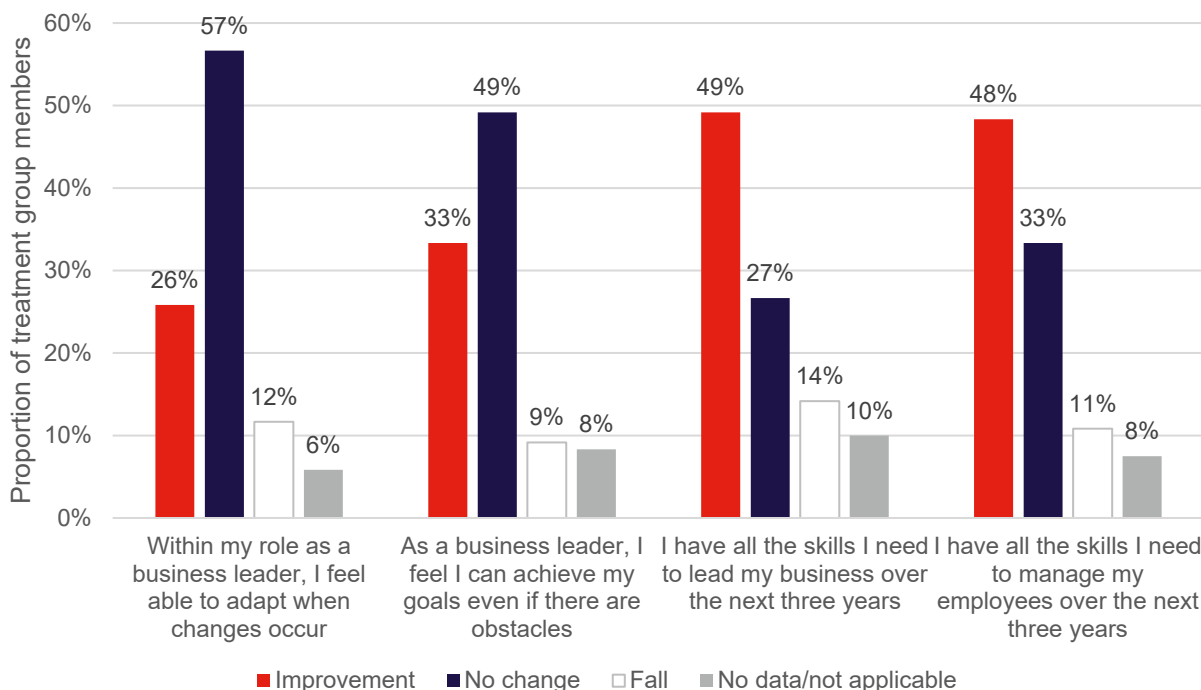
We note that this analysis does not make a comparison between the beneficiaries and the control groups. As described in the previous chapter, to keep the survey short, the survey of the matched control group did not include a self-assessment of management and leadership skills. For the SBLP drop-out control group there was insufficient baseline data to make an analysis of changed skills.

Skills and capabilities gained

The respondents from the group: beneficiaries with diagnostic data (i.e. the treatment group) provided self-assessments of their management and leadership skills and capabilities just before the start of their SBLP participation and six months after completing the course. Comparing the answers provided in both surveys can reveal the extent to which beneficiaries feel that their capabilities in different management areas have changed following SBLP participation.

The self-assessment covered four areas of skills and capabilities. As shown in Figure 4, SBLP beneficiaries most frequently reported improvements in their ability to manage their employees over the next three years and their ability to lead their business over the next three years. In both cases, nearly half (48% and 49% respectively) the beneficiaries recorded an improvement in their capabilities in these two management areas since before their participation in SBLP. For the two other management skills, a smaller proportion of beneficiaries reported improvements with higher proportions of respondents reporting no change in their ability to adapt when changes occur and 49% recorded no change in their belief they can achieve goals in the face of obstacles (respectively). Beneficiary interviews provided some indication as to why such large proportions indicated no change in their capabilities in these areas. They tended to speak of how SBLP participation had improved their general knowledge and confidence, but could not always be sure how they could directly apply their learnings to specific issues associated with running their business

Figure 4: Members of treatment group whose self-assessed management capabilities changed at impact survey relative to diagnostic survey



Source: Technopolis analysis of treatment group telephone survey and diagnostic survey (n=120).

The beneficiary interviews revealed a wide range of areas in which participants felt they had improved. Nearly two thirds (65% of 32) specified specific improvements in their knowledge in areas such as marketing, finance and strategic planning. Others reported having gained practical tools or general information to fill gaps in their existing knowledge.

Besides the practical tools and general knowledge gained, more than a third of the interviewees (41% of 32) reported softer skills and benefits gained from programme participation. Nine out of the 32 interviewees that provided relevant information (28%) mentioned the value of being able to learn and discuss best practice with others, be it through sharing their own experiences and concerns with others, or learning from other business leaders. Seven interviewees also mentioned that the course provided a confidence boost, either through helping encourage them to take more calculated risks within their business, or through affirming their current approaches and practices. In that sense, some interviewees have viewed SBLP as a valuable refresher of existing knowledge, rather than solely a source of new skills. In addition, around a quarter of the interviewed participants reported having enjoyed the opportunity to reflect on the business and consider their existing structures and needs in a more mindful manner.

Participant A runs a marketing company. They joined the programme to increase their business management skills and help identify any gaps in their knowledge.

They believe their engagement in SBLP strengthened their decision-making skills, particularly in terms of decisions to safeguard their business against potential future risks. They also felt that programme participation improved their leadership skills, having particularly valued course content on 'dealing with and getting the most out of your employees.' By using the capabilities gained through the programme, they find they are now less prone to being frustrated with their employees and are able to have more constructive relationships with them.

Since participation in the course, they have rethought the company's structure, particularly operations in the construction and telecoms sectors. They also now manage their stock more efficiently, which has freed up time, space, and helped improve revenue.

While beneficiaries have generally praised the interaction with peers and the knowledge and skills this has provided, a small number highlighted the cross-sectoral nature of the learning groups as being a barrier to further developing their own skills and capabilities. Seven interviewees (20% of those interviewed) felt that the variety of sectoral backgrounds, business sizes and positions meant that there was little chance to discuss ideas or best practice particularly relevant to them. As discussed in further detail below.

Changes in networking behaviours

As presented in the programme logic model, one of the intended goals of the programme was to encourage participants to interact with peers and develop networks which might outlast the programme itself. However, evidence collected from beneficiary interviews indicate that in the majority of cases, participants have not kept in meaningful contact with other participants in their SBLP cohort. Of the 31 interviewees that provided relevant feedback, nearly three-quarters (23, 74%) indicated that they had not maintained contact with anyone from their cohort. The most common reason for not keeping contact (cited by eight interviewees) was that their cohort members were too dissimilar to them, meaning that they could not see what they could learn from or use them for in the future. In several cases, beneficiaries said the sectoral diversity of their cohort members was behind this issue. For others, the concern was based in the fact that the individuals themselves did not have comparable levels of experience or hold the same position as them. Several participants said that the lack of face-to-face peer group work hampered the development of meaningful relationships. In addition, a small number of interviewees (10% of those providing feedback on their cohorts) said that they were keen to maintain contact with others in their cohort but that their fellow members had not reciprocated.

Changes in attitudes to training

A total of 24 beneficiary interviewees provided thoughts on the extent to which their experience of SBLP had left them more inclined to use similar training programmes in the future. Of these, the majority (15, 63%) indicated that they were now more inclined to use training programmes in the future. Almost half of these had already acted on this increased interest in training. Some for instance, had enrolled themselves on new training courses including MBAs and a local

council programme. Others used their new interest in business management training to actively promote other training programmes to colleagues, in some cases signing them up to other publicly funded courses. Nevertheless, for a sizeable minority of those answering the relevant question in interviews (9, 38%), SBLP participation had made no difference to their attitude towards training. These beneficiaries indicated that they already had a long-standing interest in undertaking training, and in most cases, would continue to explore future training opportunities going forward regardless of their SBLP experiences. Here, we might conclude that participation in SBLP was, itself a consequence of a positive attitude to training and learning.

Participant B is the Commercial Director at a firm that specialises in the development of transaction focused solutions to automotive companies and dealers worldwide. They joined the programme as they were looking for an opportunity to meet like-minded people who they could exchange ideas with. They had not undertaken any formal education since university having learnt relevant skills 'on the job.'

Since completing SBLP, the participant has taken part in three additional online courses. They highlighted that their experience in SBLP had inspired them to join these new courses, with SBLP having opened their eyes to the value of business training programmes. They also indicated that they would recommend that their staff participate in courses similar to SBLP in the future.

Summary

- Since their involvement in SBLP, around half of beneficiaries report feeling better able to lead their business and manage their employees over the next three years
- SBLP has played an important role in boosting the confidence of many participants, helping to encourage them to take more calculated risks with their business, or helping confirm that their current management practices were appropriate
- In several other cases, while SBLP participation has not necessarily led to the development of entirely new knowledge and skills, it has instead provided a valuable refresher on topics and tools participants may not have considered for a while
- Qualitative data suggests that, following participation in SBLP, beneficiaries are more inclined to use training courses in the future. However, for a sizeable minority, the programme has made no difference to their attitudes to training as it was something they were already interested in
- Only in limited cases has SBLP led to the development of on-going relationships or networks between participants

4. Changes made by businesses

In line with the programme logic model, participants are expected to use the skills and capabilities acquired through SBLP participation to make changes to the way they manage their businesses. It may, however, take several months and sometimes years to bring about changes to the way a company is managed and operated. At the time of the Phase 1 report, it was too soon to be able to determine or assess changes to management practices.

Respondents to the beneficiary survey conducted immediately after participation said that insufficient time had elapsed since completing the course for them to have made changes or for them to comment on how they might use their programme experiences going forward. The second beneficiary survey, the 'impact survey', undertaken six-months after participation (and corresponding control group surveys) enables us to make this assessment.

This section examines the changes participants have made since completing the SBLP, and what plans they have for making changes in the future and any barriers they face. The changes assessed include both management practices and changes targeted at responding to the pandemic and/or changes to improve business performance in the longer term. The section provides evidence to answer the high-level evaluation questions:

- HLQ3: How effective is the SBLP at encouraging SMEs to adopt new practices?
- HLQ4: What early changes are businesses making after participation in the programme?
- HLQ5: What other factors influence how and what changes businesses are making after they complete the programme?

Changes to business' general management practices

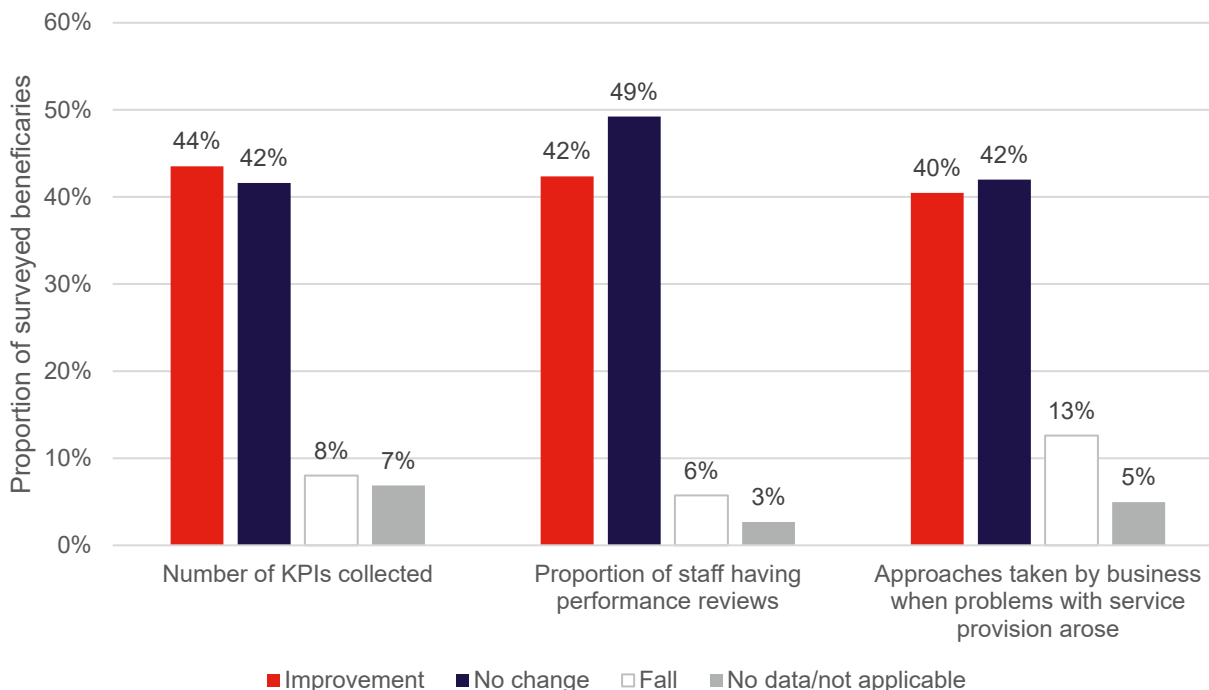
In the impact surveys we asked beneficiaries to record how their business behaved in terms of a series of specific management practices⁷ as presented in Figure 5. For each respondent, we had baseline information on their behaviours in these practices prior to SBLP participation. For the 120 telephone survey respondents the baseline data came from the diagnostic data and for the 142 online survey respondents it came from questions in the online survey asking for them to reflect on their behaviours prior to the programme. By comparing the baseline and impact data, we have been able to assess which respondents have seen improvements in their management practices. These questions regarding management practices are used, not only because they have been shown to correlate with labour productivity,⁸ but because they are based on factual answers to very specific questions. As shown in Figure 5, there is a relatively even split between those for whom management practices have improved in the six months since SBLP participation, and those whose behaviours have not changed at all. In other words, for many participants behaviours have changed over time but equally for many other

⁷ These were defined and assessed via a sub-set of the questions used by the ONS in the Management and Expectations Survey

⁸ <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/experimentaldataonthemanagementpracticesofmanufacturingbusinessesingreatbritain/experimentalestimatesfor2015>

participants it has not. The practice was most frequently reported as improved was the number of KPIs collected, with 44% indicating they were now monitoring more KPIs than they did prior to SBLP participation.

Figure 5: Respondents to the impact surveys: changes in management practices relative to before SBLP participation⁹ (combined figures for both telephone and online beneficiary impact surveys)



Source: Technopolis analysis of telephone and online beneficiary impact surveys, and SBLP diagnostic (n=262). The chart shows improvements (in endline relative to baseline) across categorical variables. In the case of KPIs collected, these were no KPIs collected, 1-2 KPIs, 3-9, or 10+.

Our econometric analysis does not indicate a large difference in the changes in management practices of SBLP beneficiaries (the treatment group) relative to the matched control group. Looking firstly at the number of key performance indicators (KPIs) being monitored, our analysis shows that at the time of the impact survey, participant firms were 0.4 percentage points more likely than control group firms to measure and monitor three or more KPIs, relative to a counterfactual control group mean of 71% (Table 4).¹⁰ The effect is not statistically significant and so it is difficult to precisely determine what effect the programme has had on changes to collecting KPIs to monitor business performance.

⁹ 'Improvements' here denote any respondent who has: improved their response to resolve problems in their service provision relative to their baseline position; are collecting more KPIs than they did relative to baseline; or have a higher proportion of staff having performance reviews relative to baseline. 'Falls' denote where the reverse has occurred for respondents.

¹⁰ The MES survey (and in turn the SBLP surveys) asked participants not the precise number of KPIs they monitored, but rather whether they monitored no KPIs, 1-2 KPIs, 3-9 KPIs, or 10 or more KPIs. Approximately 75% of the 120 participant survey respondents (89) measured three or more KPIs. We therefore chose ≥ 3 KPIs as our threshold to ensure that there were sufficient observations in our two new groups (the first group being those monitoring < 3 KPIs, and the second being those monitoring ≥ 3), while also ensuring the number of observations in one group was not excessively large relative to the other.

Table 4: Econometric results of number of KPIs measured six months after the baseline

ATE – Number of KPIs measured is ≥ 3	
Treatment	0.00472 (0.0607)
Control mean	0.707
Controls	Yes
Region Fixed Effects	Yes
Observations	205

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if the business has >25 employees, KPIs measured are >3, the share of managers with a performance review $\geq 50\%$, the timeframe to meet targets is <1 year or a mix of more and less than a year. All regressions include region fixed effects. * $p < 0.10$, ** $p < 0.05$, * $p < 0.01$.**

The finding is similar with respect to the proportion of the firm's managers that have a performance review. As Table 5 below shows, firms in the treatment group surveyed are only 0.7 percentage points more likely to conduct performance reviews for 50% or more of their managers, relative to a counterfactual control group mean of 79%. However, once again, the effect is not statistically significant.

Table 5: Econometric results of the proportion of an organisation's managers and non-managers receiving performance reviews

ATE – The share of managers with a performance review is ≥ 50	
Treatment	0.00683 (0.0280)
Control mean	0.788
Controls	Yes
Region Fixed Effects	Yes
Observations	205

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if the business has >25 employees, KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. All regressions include region fixed effects. * p<0.10, ** p<0.05, * p<0.01.**

Similarly, our analysis shows that programme participation has had a limited effect on participants taking actions to resolve issues with service provision. As shown in Table 6, it shows that, at the six-month post-completion point, treatment group firms surveyed were 5 percentage points more likely than control group firms to have resolved any problems with service provision and taken additional actions to prevent them in the future. Again, this effect is not statistically significant.

Table 6: Econometric results of firms who resolved problems and took action to prevent them when facing issues with service provision

Problems with service provision – resolved them and took action to prevent them	
Treatment	0.049 (0.0360)
Control mean	0.814
Controls	Yes
Region Fixed Effects	Yes
Observations	190

Standard error in parentheses. Baseline controls used to estimate the propensity score include the outcome variable at baseline, the age of the business and binary variables equal to one if the business has >25 employees, KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. All regressions include region fixed effects. * p<0.10, ** p<0.05, * p<0.01.**

Targeted changes to improve business performance

In addition to changes to specific management practices (as reported above) we assessed two other types of change: those made by businesses in order to respond to the effects of the COVID-19 pandemic and more strategic changes made to improve business productivity and growth.

Changes to respond to the pandemic

Overall, 84% of the surveyed participants¹¹ reported having taken actions in the past six months to support business recovery from the effects of the COVID-19 pandemic. The type of actions taken very varied. The most common type of actions reported were

- 32% (of the 204 that provided details of actions taken in the previous six months) reflected on their business and conducted strategic reviews of existing operations and structures. Examples of actions in this area typically included re-visiting existing business models and marketing strategies, devising new growth or long-term strategies, and restructuring the business.
- 27% diversified products, services or customer bases, including rethinking their offering and clients or actively acquiring new markets

Survey evidence also identified other actions taken by participants to deal with the effects of the pandemic. Of the 204 respondents to both beneficiary surveys:

- 15% reported having invested in technology, software or their virtual presence
- 15% reported having made changes to their marketing or branding
- 13% reported making changes to their approach to financial management of their business, including reviews of costs and pricing, moving to new financial management packages, and more systematic cash flow management
- 13% mentioned shifts to remote or flexible work
- 9% reported engaging with external sources, such as consultants or networks

The survey findings aligned with feedback obtained from beneficiary interviews. Approximately half of the interviewees reported having established new or reviewed existing business plans, set goals and KPIs or implemented management meetings to discuss business direction.

The survey evidence also pointed to many participants making changes to their employee numbers over the previous six months. A quarter of the 204 respondents (that provided details of actions taken in the previous six months) reported recruiting new staff or returning furloughed staff to the workplace (25%), while 6% reported reducing staff numbers .

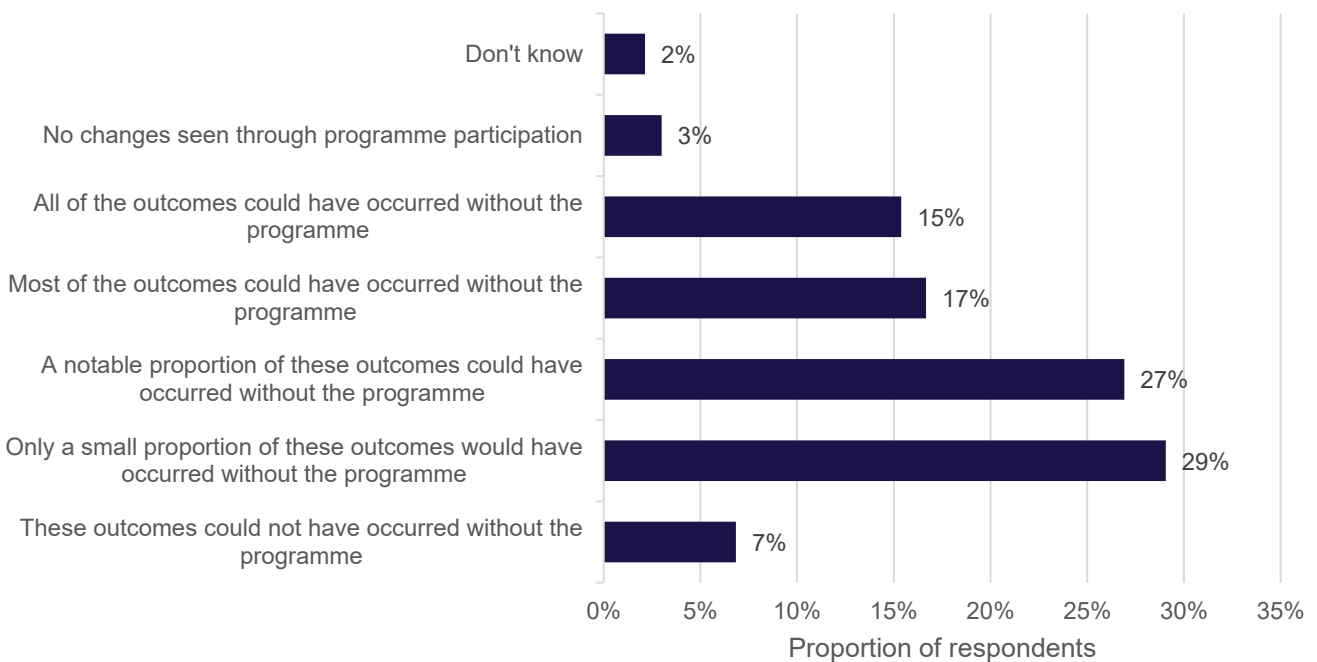
¹¹ Encompassing 256 respondents who responded to the telephone survey of beneficiaries with diagnostic data, and the online survey of beneficiaries with no diagnostic data.

Participant C holds a senior level position at a health care service provider. They joined the SBLP Programme as they were looking for training on business management and personal development to support their role within a young and fast growing business. They found the course highly valuable and were able to directly apply learning from each module to their business. The programme encouraged them to take a more reflective and evaluative view of the business than they had previously.

After participating in the course, Participant C began to implement quality report and tools to evaluate company projects. They also changed their HR practices, something which was particularly important due to a significant growth in staff numbers during the pandemic. The programme also gave the company the tools to better manage staff they had hired to work at their COVID clinics. Involvement in SBLP also gave the participant ideas for improving the operational processes in the COVID vaccination clinics, leading to increased efficiency in vaccination rates.

Survey participants were asked to self-assess the extent to which the changes made in the previous six months were attributable to their SBLP participation. Views on this were mixed. A sizeable minority (36%) felt the changes implemented were entirely or considerably attributable to SBLP participation. While, 44% reported that a notable portion or most of the changes could have occurred without participation, 15% felt that none of the implemented changes were linked to SBLP (Figure 6). This demonstrates that the majority of respondents thought that SBLP participation had some kind of effect on them, albeit the level of this effect did vary considerably.

Figure 6: Survey responses to “Which of the following statements describes the extent to which the changes [made in the last six months in response to the pandemic] are linked to your SBLP participation?”



Source : Source: Technopolis analysis of telephone and online beneficiary impact surveys, and SBLP diagnostic (n=234). Excludes those that did not answer the question.

Our econometric analysis also points to a strong link between SBLP participation and the decision to make changes to the business to respond to the effects of the pandemic – arguably at a level stronger than the self-reported assessment, although the two types of analyses cannot be directly compared. The econometric analysis shows that SBLP beneficiaries are on average more likely to have taken actions to deal with or recover from the adverse effects of the pandemic compared to the matched control group (Table 7). At the point of the impact survey, beneficiary firms were 55 percentage points more likely to have taken actions to deal with the adverse impacts of the pandemic relative to a control group mean of 27%. This effect is statistically significant at one per cent level ($p < 0.01$), with less than a 1 in 100 chance of the results only having occurred by chance. Nevertheless, one cannot discount the fact some of this increased tendency for participants to take actions to deal with the pandemic may be because SBLP participants had a predisposition to act in this way (and therefore joined a programme which was aligned this). This predisposition was not controlled for in the analysis.

Table 7: Econometric results of taking action, following SBLP participation, to respond to the effects of the pandemic

ATE – Have you taken actions in the last 6 months to deal/recover from the pandemic?	
Treatment	0.551*** (0.0565)
Control mean	0.273
Controls	Yes
Region Fixed Effects	Yes
Observations	205

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if the business has >25 employees, KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. All regressions include region fixed effects. * $p < 0.10$, ** $p < 0.05$, * $p < 0.01$.**

Changes to improve business productivity and growth

The beneficiary survey indicates that an overwhelming proportion have taken or plan to take actions that target longer-term benefits for their businesses. Nearly all (98%) of respondents indicated that had or were planning to make changes to improve productivity or grow their business, with 86% having already implemented changes (Table 8). For those that had planned to make changes in the future, most were planning to do so in the next 6-12 months rather than the next 12-18 months. These responses align well with the responses to the survey undertaken immediately after participation in SBLP, where 94% of respondents reported that they were planning to make changes to the way they manage, organise or operate their business within the next three months.

Table 8: Beneficiary survey responses to “Have you taken any actions in the last six months to improve productivity and/or grow your business?”

Response	Number	% of total
Yes	218	86%
No – but plan to make changes in the next 6-12 months	22	9%
No – but plan to make changes in the next 12-18 months	7	3%
No	5	2%
Not sure	4	2%
Total	256	102%*

Source: Telephone survey of beneficiaries with a diagnostic data, and online survey of beneficiaries with no diagnostic. *figures do not add to 100% because of rounding

In the telephone and online beneficiary surveys, 207 individuals elaborated on the changes they had already made. They included:

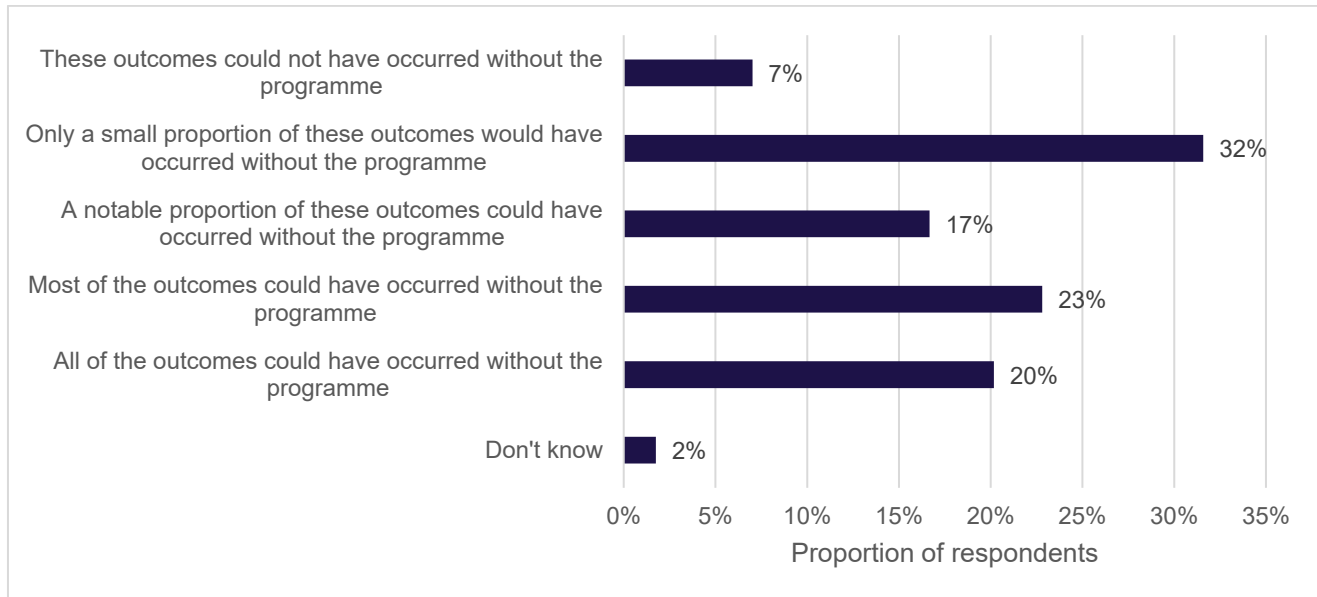
- 38% made strategic changes to their business
- 28% recruited new staff
- 27% made changes to their personnel and approach to human resources
- 21% reported having invested in technology, such as bringing in automation or acquiring new software
- 18% reported diversifying their customer base or the products and services they offer
- 13% of survey participants had reviewed or worked on their brand or approach to marketing
- 10% reported new collaborations with other SMEs or contracting external consultants

As with changes made to address the pandemic, the most common type of action for growth was strategic as indicated by 38% of respondents. Typical changes of this type included the restructuring of business models and teams, implementing monitoring systems, streamlining processes or adding new ones. Recruitment and personnel management were also frequently identified as actions taken to improve productivity, reported by 28% and 27% of the respondents respectively. Changes in employee management included aspects such as contributions to employee well-being and incentives, upskilling and training for leadership responsibilities as well as including teams in management meetings, and improving the clarity of definitions of responsibilities.

A total of 23 beneficiaries also provided further qualitative information on changes that they planned to implement in the future. Largely these mirrored those other beneficiaries had made over the last six months, with the most commonly reported planned change being changes to

business strategy (e.g. process changes, reviews of bottlenecks and other actions to improve efficiency), as reported by eight of the respondents (35%). Technological changes were also commonly reported, as indicated by seven participants (30%). Such actions included vehicle updates, the introduction of automation and acquisition of new software. Bringing in more staff or rethinking the engagement with existing staff was also reported by five of the 23 respondents (22%).

Figure 7: Survey responses to: “Which of the following statements most accurately describes the extent to which the longer-term changes (both already actioned or planned) are linked to your participation in SBLP?”



Source: Technopolis analysis of telephone and online beneficiary impact surveys (n=114)

While many survey respondents reported that they have made or plan to make changes focused on their business' longer-term performance, less than half (39%) believed these were predominantly attributable to SBLP involvement (Figure 7), potentially indicating that the programme attracted some participants who were proactively looking to change their business regardless of their programme participation. Nevertheless, only 20% said that the programme has no bearing on the outcomes seen. This shows that for the majority, SBLP had an effect (albeit to varying levels) on participants' decisions to make changes aimed at improving productivity. Therefore for a sizeable minority (20%) there is full deadweight associated with business changes made, for another 40% (23% + 17%) there is also. A considerable proportion of deadweight. However, for many participants at least (39%), SBLP participation has been attributable to a large extent to the changes they have made.

Participant D is a decision maker at a wholesale company that specialises in nut roasting and packing. Through participation in SBLP, they gained the confidence to upskill their staff and delegate responsibilities.

Being able to discuss and learn from the experiences with other cohort members, helped them understand the importance of upskilling staff and delegating work to improve business performance. Since SBLP participation, they have upskilled management staff and factory workers and put in place measures that allow staff to work without the participant's supervision. This has reduced Participant D's time on the factory floor, reducing costs and enabling them to focus on management.

A lower proportion of the matched control group reported that they had made changes to their business in the last six months to improve productivity and/or business growth - 44% (44 of 100 respondents compared to 86% for beneficiaries. Furthermore, 31% said that they had no plans to make productivity focused changes, compared to only 2% in the beneficiary survey.

Testing this econometrically confirms that beneficiary businesses were more likely than control group businesses to report making these types of changes. At the point of the impact survey, beneficiary businesses were 45 percentage points more likely to have taken actions to improve productivity and/or business growth relative to control group firms who on average took this type of action 44% of the time (Table 9). This finding is also statistically significant at the one per cent level ($p < 0.01$). When considered alongside the levels of self-reported additionality associated with making longer terms changes to improve productivity and growth, it suggests there is a strong level of attribution to SBLP participation. Nevertheless, one cannot discount the fact some of this increased tendency for participants to take greater action to improve productivity could be due to participants being more predisposed to such behaviours (and therefore joined a programme which would help them achieve this).

Table 9: Econometric results of longer-term changes following SBLP participation

ATE – Have you taken actions in the last 6 months to improve productivity?	
Treatment	0.452*** (0.0603)
Control mean	0.444
Controls	Yes
Region Fixed Effects	Yes
Observations	205

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if the business has >25 employees, KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. All regressions include region fixed effects. * $p < 0.10$, ** $p < 0.05$, * $p < 0.01$.**

Barriers to implementing business changes

While the majority of SBLP beneficiaries reported making changes to their businesses, we also explored any barriers that prevented them from implementing the knowledge and learning gained from the programme via interviews. Of the 30 respondents providing feedback on this area, eleven cited time or capacity issues. Most of the consultees cited difficulties in finding time to work through ideas learnt through SBLP, especially while dealing with the pandemic. Three interviewees, in turn, reported a lack of resources preventing them from implementing actions identified through SBLP. Other reported barriers cited by a small number of interviewees included course content not being relevant to their business (including those lacking in any real management infrastructure), and interviewees' colleagues showing resistance to change.

Seven consultees felt that, by altering the course structure slightly, it would have been easier to implement some of the knowledge and capabilities they acquired through SBLP. Some consultees spoke of the course content not always being relevant to their business (course material being more focused on larger businesses for example), making it difficult to apply learnings to their own business. One interviewee suggested that the ten-week programme could not realistically meet the varied needs of all attending business leaders and would like to see the introduction of optional in-depth modules. Four of the seven interviewees advocating a change in course structure, said some follow-on post-programme support would have made it easier to introduce changes to their business. Suggested forms of support included alumni events, one-off refreshers, or post-course mentorship. This said, seven out of the 30 interviewed participants could see no discernible barriers to implementing changes.

Summary

- We looked at the extent to which SBLP beneficiaries made use of the skills and capabilities gained in **two ways**: in terms of adopting specific well-defined **management practices** known to correlate with improved productivity; and in terms of implementing **changes to improve their business** either to respond to the pandemic or to improve productivity and/or business growth.
- For management practices the results are mixed. Six months after participation in SBLP there is a relatively even split between those for who reported improved practices and those whose practices have not changed. The econometric analysis however suggests that for all three practices considered, there is no statistically significant improvement for the beneficiaries compared to the matched control group.
- Results are much more positive for implementing business changes
 - A large proportion of SBLP beneficiaries (84%) have taken actions in the six months since SBLP participation to respond to the pandemic. Changes include re-visiting or reviewing strategic, operational, and financial plans, as well as diversifying products, services, or markets
 - While the self-reported attribution suggests around a third of these changes were due to SBLP participation, the econometric analysis showed that participant businesses were significantly more likely to have made such changes compared to a control group

- A similarly large proportion of SBLP beneficiaries (86%) have taken actions in the six months since SBLP participation that target longer term benefits in productivity and/or business growth, and a further 9% intend to do so with the next 6-12 months. Actions include restructuring business models and teams, streamlining or changing processes, recruitment and improved staff management
- Approximately 40% of survey respondents indicated that these actions targeting productivity and growth were in some way attributable to SBLP participation. Again, econometric analysis showed that participant businesses were significantly more likely to have made such changes compared to a control group
- Taken together, the self-reported levels of attribution and the econometric analysis for both types of actions indicate a strong level of attribution of the changes made to SBLP participation
- The difference between the low-level of changes made to specific management practices versus taken to deal with the pandemic or improve business performance may be a result of the very precise definitions of the former and the more open and broad definition of actions taken. However, it might also be a consequence of the pandemic itself, when more standardised good practice in business management became irrelevant in the face of dealing with the economic shock of the pandemic

5. Early effects on business performance

It takes time for actions taken and changes made to translate into improved business performance and a full impact evaluation, at a later point in time, will investigate these effects further.¹² Nevertheless, we explored potential effects on performance through the survey and interviews with beneficiaries.

Surviving the pandemic

In many cases (12 of the 34 interviewed, 35%), beneficiary interviewees stated that participation in SBLP had no real bearing on the ability of their business to survive the pandemic.¹³ Nevertheless, of the 34 interviewed, 15 (44%) indicated there was at least a partial link between programme involvement and their business being better able to survive the pandemic. For some, SBLP helped the beneficiary to adjust their short-term business strategy to make it better able to respond to the pandemic. In other cases, SBLP's contribution was to diffuse, helping instil good practice and behaviours in the company and improve business leaders' soft skills. This contributed to improved relationships with staff and more effective businesses, which made them better placed to deal with the economic effects of the pandemic.

In a small number of cases however, it is clear that SBLP participation has had a direct effect on the firm's ability to survive the pandemic. As outlined in the example below, one participant spoke of how the programme gave them the knowledge and skills in business finance to submit a better, and ultimately successful, loan application. In another instance, speaking with course facilitators and other cohort members encouraged one participant to invest more in the business during the pandemic, including the launch of new products. For another participant, receiving guidance from peers and course facilitators helped provide the impetus needed to launch an entirely new business which has already secured sales.

¹² This study will help enable an impact evaluation using secondary data from business databases to be undertaken in future. The results from this study will provide the baseline data for SBLP participants and two control groups for a future impact evaluation.

¹³ There were some instances where interviewees were uncertain of the effects of participation on their business during the pandemic, or who did not provide feedback on this theme.

Participant E is the Business and Finance Manager of an independent veterinary business. They joined SBLP to help gain knowledge in **areas of business** they previously had little experience in, most notably marketing and employee management. They also wanted some guidance in how to write a financial plan.

Through their participation in SBLP, Participant E learnt how to put together a business and financial plan which was shared with colleagues. The participant has stated that because of their involvement in the programme, they developed a better understanding of the company's financial situation **and as a result** they were **in a much better position** to provide all the details that a bank needed to approve a loan they had applied for during the pandemic.

Participant E believes the company will continue to grow, and credits the knowledge gained through SBLP as a contributing factor.

Potential effects on future business performance

Interviewed beneficiaries found it difficult to say with confidence that SBLP participation was likely to improve their business' future performance. Many said that they either could not foresee any business performance benefits, or that it was still too soon to know what future effects the programme would have on them. Nevertheless, several interviewees said that they felt that the programme could well have a positive bearing on future business performance. Eight interviewees (23%) spoke of SBLP having given them a knowledge bank and/or improved management skills which they can draw on as needed in the future to help ensure their business is better managed and are in a better position to deal with any threats or opportunities that emerge in the future. Another small group of interviewees spoke of how some of the management changes introduced had led to a happier and more productive workforce, which they hoped would benefit the business in the future. A small number of interviewees (four) spoke of how SBLP participation was likely to lead to more tangible and direct effects on future business performance. One for example spoke about how the programme had helped them explore new and potentially lucrative markets and the example below shows how one participant plans to use the knowledge gained from the programme to bring about long-term reductions in the business's cost base.

Participant F is the Managing Director of a business that provides structural steelwork and metal fabrication services.

Throughout their career, the participant has held lead technical roles in multinational engineering companies. During the pandemic, they became the Managing Director of the family business which itself was seeking to implement restructuring changes. The participant joined SBLP in large part to learn the management skills and knowledge needed to lead a SME, and to help them with the firm’s restructuring.

The participant was clear that their involvement in SBLP will improve the company’s longer-term future performance. They stated that the course encouraged them to take a structured approach to analyse their business to understand where it is profitable and what can contribute to longer-term value for the business. As a result they have decided to remove some legacy equipment from the business to reduce costs.

They also noted that the course acted as a stimulus for them to think more holistically about the business and develop a company mission statement and long-term vision. While these were actions that the participant planned to make before joining SBLP, the programme helped accelerate the rate of change by providing external validation that their ideas and plans were appropriate.

Our econometric analysis shows that relative to the control group, the beneficiary group is still more optimistic about future growth expectations, as revealed in the six-month post completion responses. As shown in Table 10, relative to a control group mean of 86.9%, participant firms are 7.3 percentage points more likely to expect positive business growth in the next three years. With $p < 0.10$, the results are statistically significant at 10 per cent level (there is less than a one in ten chance of the results occurring by chance). Nevertheless, one cannot discount the fact some of this increased business growth confidence comes from participant businesses being inherently better placed for growth than the control group.

Table 10: Econometric results of the expectation for future business growth

ATE – Do you expect the business to grow in the next 3 years	
Treatment	0.0725* (0.0396)
Control mean	0.869
Controls	Yes
Region Fixed Effects	Yes
Observations	205

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if the business has >25

employees, KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. All regressions include region fixed effects. * p<0.10, ** p<0.05, * p<0.01.**

The econometric analysis also suggests that participation in SBLP has had a bearing on employment during the pandemic. At the point of the six-month post completion survey, we have found that programme involvement has had a positive and statistically significant effect in terms of a tendency towards employment growth. Prior to participation in SBLP both the treatment group and the control group had the same likelihood of having 25 or more employees (having 25 employees are a suitable indicator for the profile of participating SMEs). Six months after participation, the treatment group (i.e. participating firms) are 19.7 percentage points more likely to have more than 25 employees relative to the control group (Table 11). The extent to which these employment changes may be due to other factors, particularly support via the Coronavirus Job Retention Scheme, are explored further in Chapter 6.

Table 11: Econometric results of the business having more than 25 employees in comparison to the baseline position

ATE – The business has >25 employees	
Treatment	0.197*** (0.0285)
Control mean	0.0610
Controls	Yes
Region Fixed Effects	Yes
Observations	205

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if the business has >25 employees, KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. All regressions include region fixed effects. * p<0.10, ** p<0.05, * p<0.01.**

Furthermore, as shown in Table 12, our analysis also shows that in the six months since completing SBLP, the treatment group is 48 percentage points more likely to have seen some level of growth in its total number of employees relative to the control group. Indeed, the average employment growth in the treatment group was 18% while for the control group it was 27%. This is a strong and very statistically significant effect, with only a 1 in 100 chance of the results occurring by chance. Nevertheless, one cannot rule out some of these improved prospects were due to the fact that firms with better prospects may have been more likely to sign up to SBLP.

Table 12: Econometric results of the business having seen employment growth since 6 months prior to survey

ATE – Employment growth	
-------------------------	--

Treatment	48.36*** (13.24)
Control mean	-26.98
Controls	Yes
Region Fixed Effects	Yes
Observations	203

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if the business has >25 employees, KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. All regressions include region fixed effects. * p<0.10, ** p<0.05, * p<0.01.**

Summary

- In many cases, beneficiary interviewees indicated that participation in SBLP had no real bearing on the ability of their business to survive the pandemic, but a sizable minority indicated a partial link between programme involvement and their business being better able to survive the pandemic.
- At this point in time many beneficiaries are uncertain as to whether SBLP participation and the changes made to date will have a meaningful effect on their longer term future business performance. Nevertheless, they do view the knowledge gained as a useful bank they can draw on in future to deal with issues as they arise
- The econometric analysis suggests a slightly more positive outcome, with beneficiaries being more confident about their business' growth potential compared to the control group. They also appear to be already experiencing some degree of employment growth relative to the control group.

6. Attributing changes to the programme

Isolating programme effects in a complex real-world context is always a challenge but in the case of SBLP (and other current business support programmes) there is the added complexity created by the pandemic. The changed economic environment businesses affect different firms in different ways – while some firms have been negatively affected by lockdown, others have experienced high demand for their products and services while others have had to adjust to staff working from home or covid-related staff shortages. The pandemic also affects the complexity of the evaluation itself. The covid-specific business support schemes are not only targeting some of the same impact domains as SBLP (turnover, employment) they may also act to mask the effects of programmes such as SBLP by protecting employment. Disentangling the effects of these different programmes is important to arrive at a robust view of effects of SBLP.

This section examines the evidence collected to determine the extent to which the effects observed are attributable to SBLP participation and, as such, provides evidence for

- HLQ5 - what other factors influence how and what changes businesses are making after they complete the programme?

Usage of other support measures

The surveys collected data on use of other forms of public support¹⁴ and, as might be expected, the majority of SBLP participants (84% of 262 survey respondents) made use of these (Table 13). In fact many had used more than one form of public support (51% of 262), while 32% (84 of 262) of surveyed beneficiaries had used just one form of support. The most widely used forms of support were financial packages – 69% used the Government Coronavirus Job Retention Scheme (the so-called ‘furlough scheme’) and 47% used other COVID-related financial support schemes such as Bounce Bank loans. Nearly a quarter (22%) also used pre-existing support schemes (i.e. those already in place before he pandemic).

Table 13: Non-SBLP forms of business support received by survey respondents

Form of business support	Total number	Proportion of all respondents
The Government Coronavirus Job Retention Scheme	182	69%
Other government COVID-19 support schemes (e.g. Bounce Bank loans, Pivot and Prosper Grant, Coronavirus Business Interruption Loans scheme)	124	47%
Other public sector support (e.g. from Growth Hubs, Local Enterprise Partnerships, Chambers of Commerce)	57	22%
Other forms of support	25	10%

¹⁴ While this data was also collected at the baseline, here we report the updated data collected in the impact survey.

Private consultancies	16	6%
No other support	33	13%
Don't know	7	3%

Source: Technopolis analysis of telephone survey of beneficiaries with diagnostic data and online survey of beneficiaries without diagnostic data (n=262). Note that 3 respondents (1%) did not provide a valid response to this question

The use of these schemes was not a variable used to construct the matched control group as the data was not available to do so. However, we were able to test for differences in the use of the Coronavirus Job Retention Scheme once the impact surveys were complete and relevant data had been collected. We tested the extent to which SBLP participants are more or less likely than the control group to make use of the Government Coronavirus Job Retention Scheme since March 2020. While the econometric analysis shows that SBLP beneficiaries are slightly more likely to have used the scheme compared to the control group (at 6.7 percentage points more likely than the control group, who have a mean take-up rate of the scheme was 63.6%) (Table 14), the effect is not statistically significant. This implies that the Coronavirus Job Retention Scheme is not likely to be responsible for the observed positive effects experienced by beneficiaries. This is reinforced by the fact that the Coronavirus Job Retention Scheme is not targeting the same form of short effects, in terms of management skills and practices, as SBLP.

Table 14: Econometric results of the likelihood to use other forms of business support

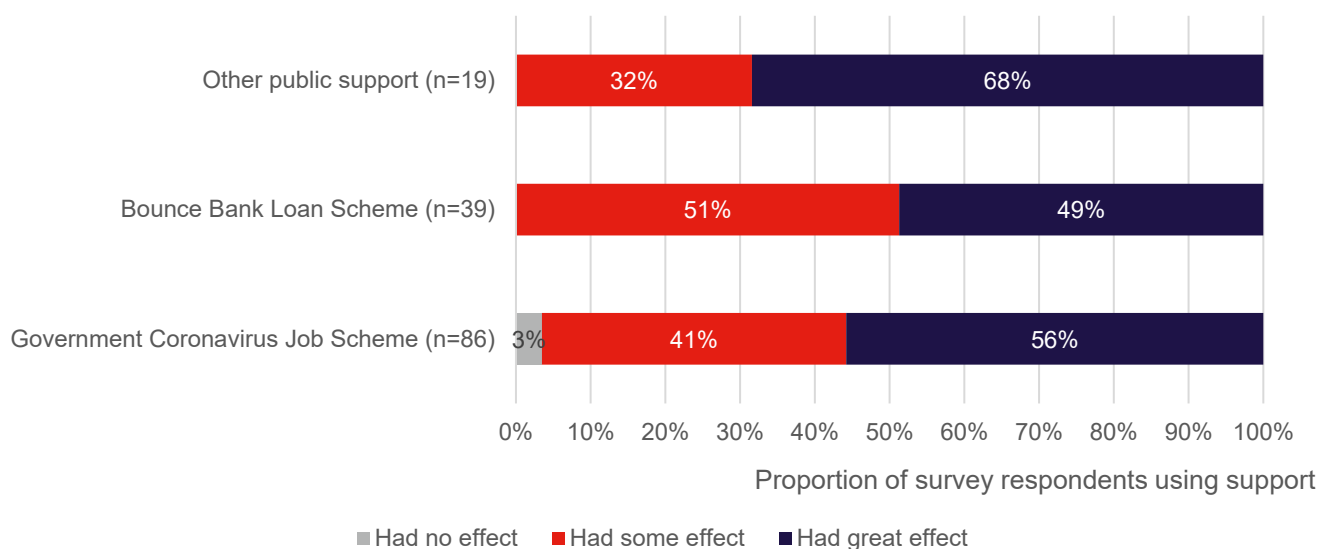
ATE – Has received support from the Coronavirus Job Retention Scheme since March 2020	
Treatment	0.0673 (0.0603)
Control mean	0.636
Controls	Yes
Region Fixed Effects	Yes
Observations	205

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if the business has >25 employees, KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. All regressions include region fixed effects. * p<0.10, ** p<0.05, * p<0.01.**

We also explored, via the impact survey, beneficiaries' views of the effectiveness of other forms of support in mitigating the effects of the pandemic. Figure 8 summarises these results,

presenting responses provided to support programmes used by at least 10% of beneficiaries.¹⁵ Nearly all the users of the three support measures said they had either some or great effect in dealing with the effects of the pandemic. The 'other public support' category includes support such as local authority grants, and business rates relief. Again, the support mechanisms are largely directed at finance and cashflow and not at training and skills development for business leaders. Nevertheless, some of the finances made available may have been used to implement some of the business changes implemented to respond to the effects of the pandemic (as reported in Chapter 4). This might contribute, in part, to the quite low levels of perceived (self-reported) attribution of these effects to SBLP (Figure 6, Figure 7) either because these other schemes made a direct contribution and/or because business leaders themselves cannot disentangle the effects of different forms of support used simultaneously or in close succession.

Figure 8: How effective survey respondents found different non-SBLP business support measures they used in mitigating the impact of the COVID crisis



Source: Technopolis analysis of telephone survey of beneficiaries with diagnostic data

Added value of the programme

Another way of determining SBLP's additionality is by ascertaining the added value that participants feel it has provided them. This centres on understanding whether the programme has provided new and valuable knowledge or experiences and whether the benefits gained were proportionate to the time spent participating in it. During interviews with beneficiaries, we explored whether SBLP participation was a worthwhile use of their time – whether the gains from participation offsetting the time costs associated with SBLP involvement. Of the 29 interviewees responding to this question, nearly all (26, 90%) said that SBLP involvement had been a worthwhile use of their time. Interviewees commented that SBLP participation had provided a good opportunity to learn new material and to reflect on their businesses. While they tended to say that some topics and modules were more useful than others, the interviewees tended to note that there was more content that was relevant to them than not.

¹⁵ There were a number of support mechanisms used by less than 10 respondents (e.g. Chambers of Commerce, Growth Hubs, Coronavirus Business Interruption Loan). The low sample sizes is likely to lead to very skewed results and are therefore excluded from our analysis

Some interviewees also commented on ways that the programme could have been more worthwhile, with frequently cited improvements included having some in-person delivery (especially the peer group elements), giving more time to certain modules and/or programme activities, and having more engaged cohort members.

We also assessed programme value by participants' willingness to pay for an identical programme offer were one available commercially or through the private sector. Of the 31 interviewees that provided feedback on this question, the vast majority (87%, 4) said that they would be prepared to pay something to access an identical programme. In a small number of cases, interviewees said the programme would only be worth a small administrative fee but nearly half of all interviewees (15, 48%) indicated that a maximum cost of at least £1,000 would be fair given the benefits they gained from the programme. Taking all stated views into account, the median maximum fee that beneficiary interviewees were prepared to pay to access SBLP was £1,000, with a range of £100 to £5,000. By way of context, the median value is greater than the participant fee for Help to Grow: Management (which currently charges participants £750),¹⁶ a programme very similar in scope, nature, and remit to SBLP.

Participant F is the Commercial Director at a brand strategy, design and innovation agency. While they had previous experience in running entrepreneurial small businesses, it had been a while since they had done any university-provided study. They therefore joined SBLP to fine-tune their business skills.

Participant F stated that they gained a considerable amount from their programme participation. In particular they improved their knowledge of business development, productivity analysis, developing KPIs and accessing funding and grants. Indeed, they stated that they use the knowledge gained through SBLP on a daily basis.

The participant stated that without their participation in the SBLP Programme, their business would look different to how it does now. They attributed the SBLP Programme for making the business “more together and better at what [they] do.” They added, that SBLP has helped widen their network, having remained in touch with the course leader and one of the administrative leads.

While it is clear that many have valued participation in SBLP and feel they have benefited, it does remain unclear how useful such a programme will be outside a pandemic context. SBLP was implemented during the pandemic when business and managers faced a unique set of challenges to their business, and for some a unique set of opportunities (e.g. lockdowns and online courses providing more time for learning than might otherwise would be possible). Only further research will determine how far the SBLP offer might be valued by business leaders going forward.

Summary

- Most surveyed beneficiaries have used other business support schemes – the Coronavirus Job Retention Scheme in particular but also other covid-related schemes providing finance or supporting cashflow

¹⁶ As of December 2021.

- SBLP appears to have been of value to participants. The vast majority of interviewed beneficiaries said that programme participation was a worthwhile use of their time, with the benefits gained being proportionate to the time spent participating in it. Indeed, on average they would be willing to pay £1,000 to access an identical commercially available programme.
- SBLP operated in a very unique set of circumstances with the pandemic. To that end, further research will be needed to determine whether an SBLP-style intervention provides value going forward, especially as the country comes out of the pandemic.

7. Conclusions and recommendations

HLQ3: How effective is the SBLP at encouraging SMEs to adopt new practices?

SBLP appears to have been effective in improving the management skills and capabilities of around half of its participants.

- This group have improved their ability to lead their business and manage their employees in the coming years
- The programme has played an important role in boosting the confidence of participants, helping encourage them to take more calculated risks with their business, or helping confirm their existing ideas and practices were the right ones
- SBLP appears to have been particularly effective in providing respondents with new knowledge on areas such as marketing, finance and strategic planning.

For some participants, rather than developing new skills, the programme has provided a useful knowledge 'bank' for the future or provided a valuable refresher on business concepts and best practice.

There appears to be a link between SBLP participation and being more inclined to use training courses in the future and/or encouraging other colleagues to participate in training and learning. Although for a sizeable minority the programme has made no difference to their attitudes to training as it was something they were already interested in.

SBLP has been less effective in encouraging SME leaders to develop and maintain networks with other business leaders – very few remain in contact with other members of their SBLP cohort. This may be due, in part, to the necessity for virtual delivery of the SBLP courses during the pandemic where there were as no opportunities to meet face-to-face and build relationships.

Our analysis also shows mixed results in participants using the new capabilities and practices gained through SBLP participation to improve performance against a specific set of management practices known to correlate with productivity:

- There is a relatively even split between those for whom management practices have improved in the six months since SBLP participation and those whose behaviours have not changed at all
- While the econometric evidence suggests that SBLP participants were, to a limited extent, more likely than a control group to see improved performance against a specific sub-set of management practices known to correlate with productivity, none of these changes were at a statistically significant level.

HLQ4: What early changes are businesses making after participation in the programme?

There is strong evidence that a large proportion of SBLP beneficiaries have made changes to their business since their participation – both in terms of immediate changes to respond to the pandemic and changes targeting long term business performance.

Actions to respond to the pandemic

The vast majority of survey participants (84%) have taken actions in the six months since SBLP participation to tackle the effects of the pandemic. Indeed, there is both strong and statistically significant likelihood of programme participants taking action relative to a control group and a reasonable level of self-reported attribution of changes made to SBLP participation.

These changes have centred on:

- Revisiting existing business models, and operations marketing strategies
- Reviewing business plans
- Diversifying products, services or customer bases

Actions to improve business productivity and growth

Participant businesses have also commonly taken actions in the past six months to improve longer term business productivity. Again, econometric analysis has confirmed that participant businesses were more likely to have made such changes compared to a control group.

Typically these changes have centred on:

- Making changes to business strategy (e.g. restructuring business models and teams)
- Recruitment of new or different personnel
- Changing human resource management approaches.

Changes to business performance

Most of the measurable changes in business performance resulting from the actions already taken will take some time to occur and will be addressed in a later impact evaluation. While the effect of actions taken to respond to the pandemic include business survival, which would ordinarily be observable in the short term (as data for business failure is readily available in business datasets) at the time of the evaluation this effect would have been masked by the support available under the Coronavirus Job Retention Scheme. Therefore, this early impact evaluation investigated potential effects on business performance through the survey and interviews with beneficiaries.

At this stage, it does not appear that SBLP participation has had any significant effects on the ability of their business to survive the pandemic. While some businesses felt SBLP gave them useful tools to help run their business better during the pandemic, this has not tended to translate into a view that the programme has been the main factor in business survival.

The econometric analysis suggests that there has been some growth in employment among SBLP participants compared to the control group within the context of the pandemic and use of the Coronavirus Job Retention Scheme by more than two-thirds of beneficiary respondents.

Beneficiaries also seem uncertain whether SBLP participation will have a meaningful effect on their longer term future business performance. By and large, they see the knowledge gained as a useful bank they can draw on in the future to deal with issues as they arise. Nevertheless, our econometric analysis shows that relative to a control group, beneficiaries are more confident about their business' growth potential going forward from now.

HLQ5: What other factors influence how and what changes businesses are making after they complete the programme?

This evaluation question is addressed in two ways: in terms of participants' views on the barriers to implementing changes and in terms of other forms of support that may have contributed to the changes made.

Participants highlighted a number of barriers that have prevented them from implementing the skills and knowledge gained through SBLP. The most common of these was having insufficient time or capacity to work through new ideas, especially while dealing with the effects of the pandemic.

Most surveyed beneficiaries have used other forms of business support, most commonly the Coronavirus Job Retention Scheme. The econometric analysis showed that there was no statistically significant difference in use of the Coronavirus Job Retention Scheme between SBLP beneficiaries and the control group, indicating that the findings regarding business changes made to date can be considered as attributable to the programme rather than this form of support. Being as the Coronavirus Job Retention Scheme targeted protecting employment via direct funding and SBLP targeted the development of management skills and practices this would seem entirely reasonable.

Participants made use of other forms of financial support made available during the pandemic such as the Bounce Back Loans and Pivot and Prosper. Beneficiaries have tended to find these types of schemes beneficial to their business and they may have contributed to the positive changes made by SBLP participants, possibly providing the finance needed to implement the changes identified via SBLP. However, there is insufficient data to test for this.

It is also worth acknowledging that with business leaders self-selecting on to the programme, it is possible that SBLP participants were more proactive about improving their business and their own management skills than non-participants. To that end, there is some potential for our analysis to have over-estimated programme effects, with participants making changes that they would have made without SBLP involvement. However, the baseline data collection tools nor the survey did not assess this and therefore this parameter was not controlled for.

Recommendations

- By and large, programme participants have valued their SBLP involvement – it has proved an effective way of sharing management best practice and instilling greater

confidence amongst SME leaders. This has led to a higher level of changes among participants than a matched control group. In addition, many participants have stated that they would be willing to pay to access such a programme given the benefits they gained from it.

- This would suggest that there is value in continuing with programmes similar to SBLP for SMEs who could benefit from improvement in management capabilities (and we note that a new programme, Help to Grow: Management, is already in place as a successor to SBLP). Nevertheless, the scale of a new programme needs to be considered in light of the size of the market of suitable and willing participants.
- Any successor programme should consider a charging fee for participation – and we note that the Help to Grow: Management programme is doing so. The financial commitment may help reduce programme drop-out rates.
- It is too soon to determine the longer-term effects of the programme on business performance (productivity and growth) therefore we recommend that a full impact evaluation is undertaken using econometrics, a matched control group and business data in secondary datasets. The exact timing depends both on the time lags in data becoming available and the progress of the pandemic. Further changes to the wider economic environment and the introduction of any new schemes add complexity to the evaluation and the ability to control for all non-SBLP factors. Data-linking to sources of data on use of other public schemes would improve the econometric analysis – this might be available for example via the ONS Microlab.
- The programme has fared less well in its ability to create long-lasting networks between different SME leaders. While this was due to a range of factors it was, in part, a result of the lack of face-to-face interactions between participants. However, participants also welcomed the ease and flexibility of online delivery. Any future programme should consider an appropriate balance of online versus face-to-face delivery incorporating, for example, online masterclasses and face-to-face peer groups, and the possibility of providing support for networking after the course has finished.
- While SBLP appears to have been valued by participants, it existed under some very unique circumstances with the pandemic. Further research will be needed to determine whether the SBLP will be appropriate, relevant, and effective as businesses begin operating in the post-pandemic environment.

Appendix A: Determining firms in the matched comparison group

We used a probit model to estimate the propensity score or probability of treatment, to identify control firms in Bureau van Dijk's FAME database with similar propensity scores to those of participant firms. Firms in the treatment group are those present in the SBLP baseline survey collected among SBLP enrollees (covering 2,707 different firms), while firms in the control group come from the FAME dataset. The data search in FAME rendered approximately 6 million firms in England, of which FAME recorded 2.5 million as SMEs. We subsequently excluded any firm in the control group list in FAME that was also in the SBLP enrollee sample.¹⁷

Since estimating a probit model¹⁸ (to recover the propensity scores) with millions of observations becomes a very lengthy process, we selected a random sample of 1% of the FAME sample equivalent to roughly 25,000 firms. The final sample includes 2,707 firms from the SBLP baseline survey (treatment group) and 25,073 randomly selected SMEs from FAME. To deal with potential low response rates among control firms, it is possible to extract another random sample of 1% of the remaining firms in FAME and repeat the above process to find a new set of control group firms.

To recover the propensity scores, we estimate a probit model where the dependent variable is a dummy equal to 1 if a firm belongs to the SBLP sample and 0 if it belongs to the FAME sample. The independent variables in the model include:

- age of the business,
- number of employees,
- primary 2007 UKSIC code (first two digits/division level – there are 88 divisions, from Companies House records),
- postcode area code (there are 124 area codes in UK).

We selected these variables because of their economic importance and because they are part of the limited set of variables that were collected both in the SBLP baseline survey and in FAME. We don't include turnover among the covariates in the model because turnover data is not captured for all firms, SMEs in particular, in FAME. For the primary 2007 UKSIC code, since the data in the SBLP baseline survey do not include the codes in numbers but a description of the type of industry, we used probabilistic record linkage using the company name (and postcode) when the registration number was not available.¹⁹

Other criteria for selecting covariates were to avoid variables that caused observations to be completely determined in the model. This occurs when there is a covariate pattern with only one value of the binary dependent variable instead of a covariate pattern for each one of the

¹⁷ Since the registration number in the SBLP sample is not the same as the registered number in the FAME sample, we used propensity score matching using the company name and postcode.

¹⁸ The Stata command `probit' was used in this regression that included division level industry code fixed effects and post code are codes fixed effects. Standard errors were clustered at the post code are level.

¹⁹ For the avoidance of doubt, we have only used these variables as control to help match firms for the purposes of constructing a matched comparison group. We have not used the variables listed as baseline controls for the econometric analysis of SBLP participants (relative to control groups) itself.

values of the binary dependent variable and could cause that some of the estimated coefficients have missing standard errors.

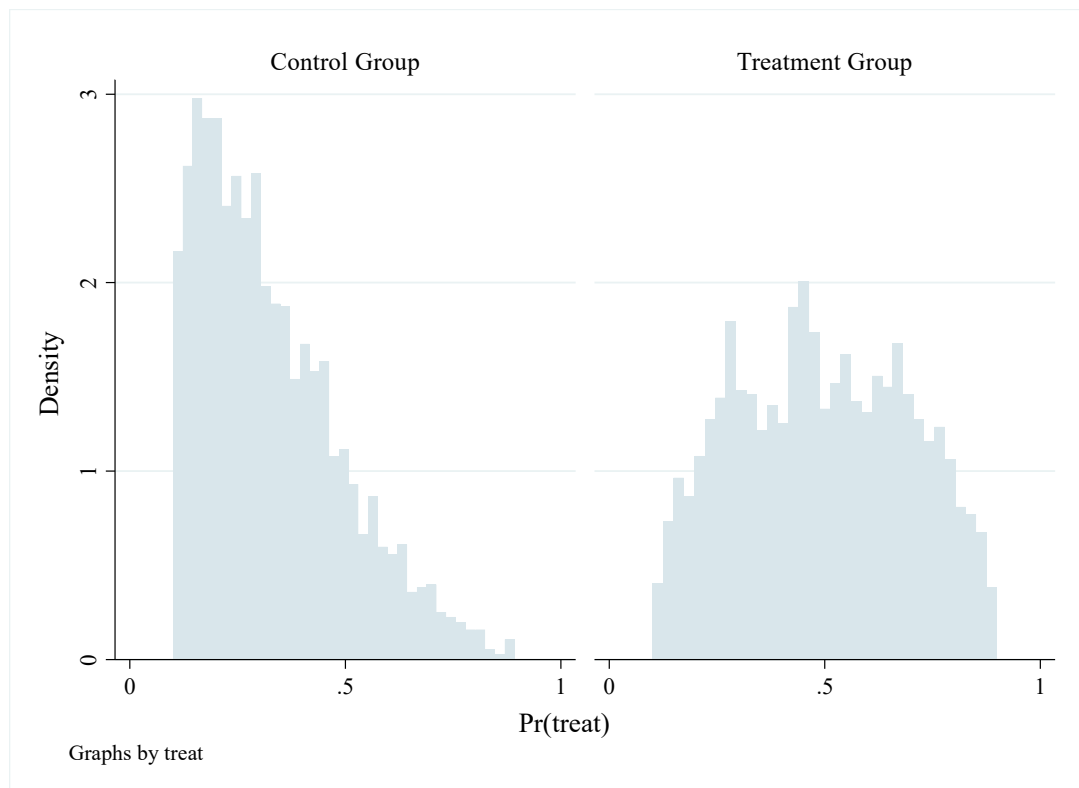
We use the Stata command `linktest` to detect a model specification error. Table 15 shows the results of the `linktest` for the model. The idea behind `linktest` is that if the model is properly specified, one should not be able to find any additional predictors that are statistically significant except by chance. `linktest` uses the linear predicted value (`_hat`) and linear predicted value squared (`_hatsq`) as the predictors to rebuild the model. If the variable `_hat` is statistically significant this confirms that we have chosen meaningful predictors (as in Table 15 with $p=0.000$), otherwise this means that the model is misspecified. On the other hand, if the model is properly specified, variable `_hatsq` shouldn't have much predictive power except by chance (consistent with the observed $p=0.717$). Therefore, if `_hatsq` is significant, then the `linktest` is significant, meaning that important variables were omitted, or the link function is not correctly specified, which is not the case.

Table 15: Results of the Linktest to test for misspecification of the probit model

Treatment (1/0)	Coefficient	Standard Error	z	P>z
<code>_hat</code>	1.003318	0.0306828	32.7	0.000
<code>_hatsq</code>	0.0112082	0.0309644	0.36	0.717
<code>_cons</code>	-0.0041243	0.0226469	-0.18	0.855

After estimating the propensity scores, we excluded from the matched comparison group sample all firms with a propensity score below 0.1 and above 0.9 to increase the chances to get more similar firms in the control group to the ones in the treatment group. This leaves only firms with a propensity score that falls within the 0.1-0.9 range and not in the extremes where the propensity score is closer to 0 and 1. Once this restriction is applied there are 2,140 firms in the treatment group and 3,322 firms in the control group. Figure 9 presents the distribution of the propensity score in the treatment and control group.

Figure 9: Distribution of the propensity scores in the treatment and control groups



Finally, we test for balance in the pre-treatment characteristics of the treatment and control group. Table 16 shows the results of the balance test performed for two variables, namely, the age of the firm and the number of employees. It also shows the p-value of the joint F tests for the joint significance of these two variables, which shows that there is no statistically significant difference between the treatment and control group when the two variables are taken together ($p=0.89$). This lends credibility to the control group that was selected and is composed of 3322 SMEs from FAME.

Table 16: Results of the Linktest to test for misspecification of the probit model

Variables	Treatment	Control	Difference	Observations
Age of the business	3.0765	3.089	-0.0125	5,458
Number of employees	3.4324	3.419	0.0134	5,458
Joint F test				
Chi2			0.21	
p-value			0.89	

Appendix B: Balance test for the main matched sample

For the main analysis, we show the results of the balance tests performed for five pre-treatment variables, namely, the age of the business and four binary variables equal to one if the business has >25 employees, if the number of KPIs measured is >3, if the share of managers with a performance review $\geq 50\%$, and if the timeframe to meet targets is <1 year (or a mix of more and less than a year). Table 17 shows that there are no statistically significant differences for any of the variables and the p-value of the joint F test also shows that there is no statistically significant difference between the treatment and control group when the five variables are taken together ($p=0.83$).

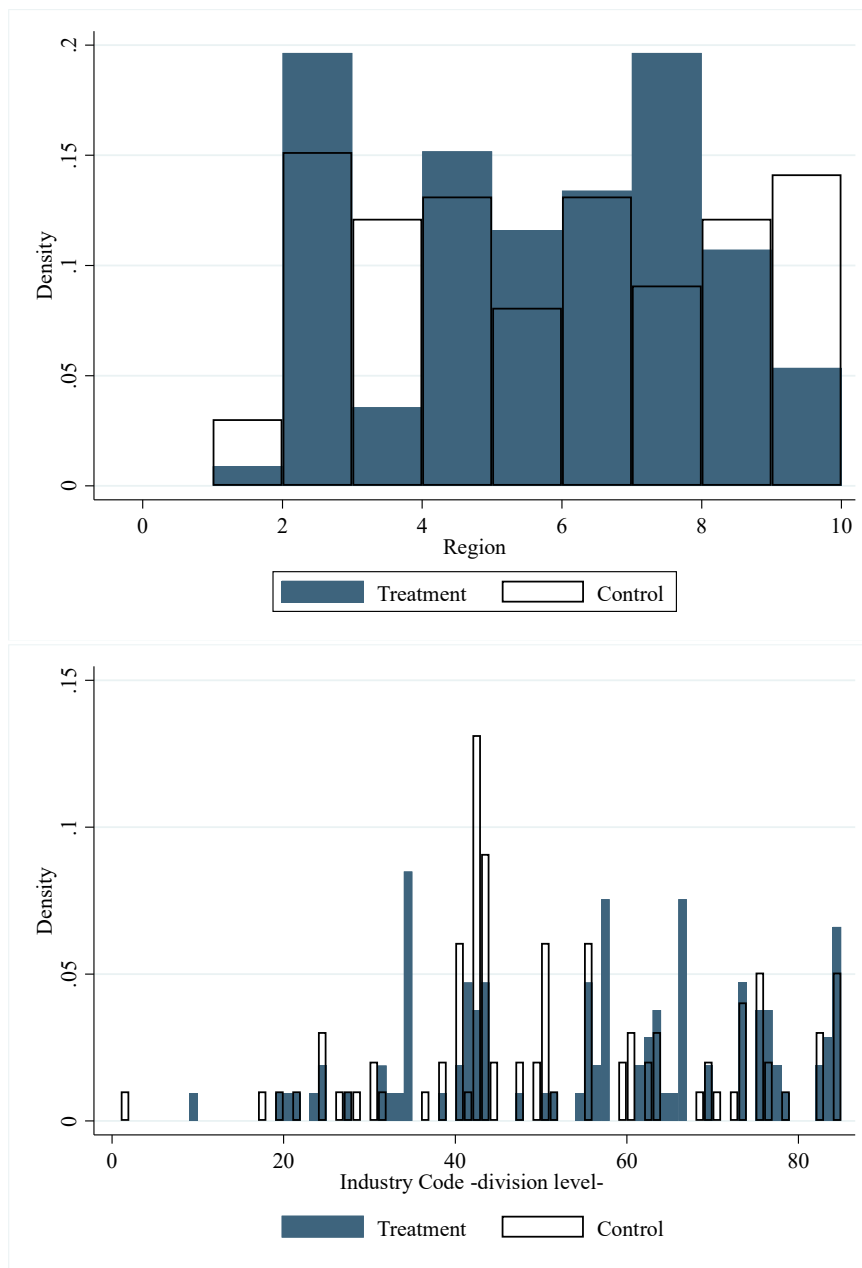
Table 17: Balance tests for the matched sample (control group)

Variables	Difference	Standard error	Observations
Age of the business	3.904	(3.396)	211
Does business have >25 employees?	0.0336	(0.0543)	211
Are KPIs measured >3?	0.0155	(0.0696)	205
Is the share of managers with a performance review $\geq 50\%$?	0.0123	(0.0666)	210
Is the timeframe to meet targets is <1 year or a mix of more and less than a year?	0.0394	(0.0673)	209
Number of employees	5.656	(4.187)	211
Joint F test			
Chi2	3.54		
p-value	0.74		

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Distribution of firms in the treatment and control group with regards to region and Industry Code (division level)

As can be seen in the following figures there is a good degree of overlap between the treatment and control group firms with regards to region and Industry Code at the division level. Regarding the latter a more marked difference is seen on the Industry Code 46, which corresponds to wholesale trade, except of motor vehicles and motorcycles.



Appendix C: Results using drop-out firms as a control group

Contrary to the main analysis, when dropouts were used as control group, we found some baseline imbalances between the treatment and dropout/control group samples, in particular that treatment firms are significantly less likely than drop-out firms to have more than 50% of managers with a performance review (see more details in Appendix D). Since drop-out firms seem to have better management practices even in the absence of the programme, this may explain the smaller effect sizes that we report in this section.

Early changes made by businesses

In the main analysis beneficiary firms were 55 percentage points more likely to have taken actions to deal with the adverse impacts of the pandemic relative to a matched control group mean of 27%. When we use drop-out firms as the control group, we find a smaller 44 percentage points significant positive effect. Note that the mean for the drop-outs control group is higher (37%) than the control group mean for the matched sample (27%). The fact that on average drop-out firms were more likely to take actions than firms in the matched control sample reinforces the idea that drop-out firms had better management practices even in the absence of the programme and explains the smaller effect size found for them.

ATE – Have you taken actions in the last 6 months to deal/recover from the pandemic?	
Treatment	0.444*** (0.0649)
Control mean	0.371
Controls	Yes
Observations	204

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. *p<0.10, **p<0.05, *p<0.01.**

Longer-term changes made by businesses

Similarly, in the main analysis, beneficiary firms were 45 percentage points more likely to have taken actions in the last 6 months to improve productivity relative to control group firms who on average took this type of action 44% of the time. When we look at the results using drop-out firms as the control group, we find a smaller (22.5pp) effect. Note that as before, the outcome mean for the drop-outs group is 66%, again higher than the mean for the matched sample (44%), which helps explain the smaller effect.

ATE – Have you taken actions in the last 6 months to improve productivity?	
Treatment	0.225*** (0.0568)
Control mean	0.660
Controls	Yes
Observations	204

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. *p<0.10, **p<0.05, *p<0.01.**

Changes to business' general management practices

In the main analysis, participant firms were only 0.4 percentage points more likely than control group firms to measure and monitor three or more KPIs, relative to a counterfactual mean of 71% among control group firms. The effect is smaller when using drop-out firms as control group (-0.6 percentage points). Again, the outcome mean among drop-out firms (78%) is higher than the observed for the matched sample (71%).

ATE – Number of KPIs measured is >3	
Treatment	-0.00601 (0.0606)
Control mean	0.784
Controls	Yes

Observations	204
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Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. *p<0.10, **p<0.05, *p<0.01.**

In the main analysis, participant firms were only 0.7 percentage points more likely than control group firms to measure and monitor three or more KPIs, relative to a counterfactual mean of 79%. When we use drop-out firms as control group, the effect is larger (3.1 percentage points), although within the confidence interval of the effect for the matched sample. Again, the outcome mean among drop-out firms (87%) is higher than the observed for the matched sample (79%).

ATE - The share of managers with a performance review is >=50%	
Treatment	0.0312 (0.0478)
Control mean	0.876
Controls	Yes
Observations	204

Standard errors in parentheses. Baseline controls used to estimate the propensity score include binary variables equal to one if KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. * p < 0.10, ** p < 0.05, * p < 0.01**

The effect on the likelihood of solving a problem when dealing with problems with service provision (-3.8pp) is similar but smaller than the one reported in the main analysis (4.9pp). The mean outcome for the drop-out sample is as before larger than for the drop-out sample (98% vs 81%).

ATE – Problems with service provision – resolved them and took action to prevent them	
Treatment	-0.0385 (0.0379)
Control mean	0.979

Controls	Yes
Observations	201

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. *p<0.10, **p<0.05, *p<0.01.**

Early effects on future business performance

The effect on the likelihood of having more than 25 employees (22.7pp) is similar to the one reported in the main analysis (19.7pp). The mean outcome for the drop-out sample is also similar to that for the drop-out sample (0.7%).

ATE – The business has >25 employees	
Treatment	0.227*** (0.0482)
Control mean	0.0710
Controls	Yes
Observations	204

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. *p<0.10, **p<0.05, *p<0.01.**

Effect on the likelihood of take-up of the Coronavirus Job Retention Scheme (for assessing attribution)

In the main analysis we reported that SBLP beneficiaries are 6.7 pp more likely to have used the Coronavirus Job Retention Scheme compared to the control group but that this difference was not statistically significant. When the control group is drop-outs, we find that treatment firms are 17.5 pp more likely to take-up the Coronavirus Job Retention Scheme (significant at 5 % level). The fact that drop-out firms are less likely to receive business support reinforces the idea that these firms were in a better situation not only in terms of management practices compared to treatment firms.

ATE – Has received support from the Coronavirus Job Retention Scheme 2020	
Treatment	0.175** (0.0709)
Control mean	0.535
Controls	Yes
Observations	204

Standard error in parentheses. Baseline controls used to estimate the propensity score include the age of the business and binary variables equal to one if KPIs measured are >3, the share of managers with a performance review >=50%, the timeframe to meet targets is <1 year or a mix of more and less than a year. *p<0.10, **p<0.05, *p<0.01.**

Appendix D: Balance tests for analysis that uses drop out firms as a control group

We present the result of the balance tests when we consider drop out firms as a control group. Table 18 below shows the results of balance tests performed across three baseline variables (available for drop out firms). There is a statistically significant difference for one the variables, namely the likelihood that the share of managers with a performance review is ≥ 50 , meaning that treatment firms are significantly less likely that drop-out firms to have more than 50% of managers with a performance review. This explains why the joint F test also shows a 10% significant difference between the treatment and control group when the three variables are taken together ($p=0.08$). This result is not unexpected since drop outs are often not necessarily comparable to participants across the same dimensions.

Table 18: Balance tests for the drop put firms as a control group

Variables	Difference	Standard error	Observations
Are KPIs measured >3?	-0.0200	(0.0690)	206
Is the share of managers with a performance review $\geq 50\%$?	-0.153**	(0.0620)	207
Is the timeframe to meet targets is <1 year or a mix of more and less than a year?	0.0244	(0.0678)	205
Joint F test			
Chi2	6.85		
p-value	0.077*		

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix E: Power calculations for sample sizes

In evaluating SBLP, we have compared the performance of beneficiaries against a control group of similar organisations. For each quantitative indicator, this required us to compare two means – the mean of the beneficiaries and of the control group – and test the hypothesis that the programme causes the two means to be statistically different.

The formula for the estimation of sample size and power for comparing two means is:

$$n = \frac{\left(\frac{Z_{\alpha/2}}{2} + Z_{\beta}\right)^2 * 2\sigma^2}{d^2}$$

Where n is the sample size per group, $Z_{\alpha/2}$ is the critical value of the Normal distribution at $\alpha/2$ (e.g. for a confidence level of 95%, α is 0.05 and the critical value is 1.96), Z_{β} is the critical value of the Normal distribution at β (e.g. for a power of 80%, β is 0.2 and the critical value is 0.84), σ^2 is the population variance, and d is the difference one aims to be able to detect accurately.

As indicated by the formula above, the required sample sizes to detect the impact of SBLP depended on the following factors:

- Confidence level ($1-\alpha$): This reflects the confidence with which we would like to detect a significant difference between SBLP participants and non-participants. The higher the confidence level, the larger the required sample size. **The common choice is at least 95%.** While $1-\alpha$ is the confidence interval, α represents the probability of a type-I error – finding a difference when a difference does not exist. Most literature uses a cut-off of 5%, which indicates a 5% chance that a significant difference is actually due to chance and is not a true difference.
- Power ($1 - \beta$): The power is the probability of detecting a significant difference between SBLP participants and non-participants. The higher the power, the larger the required sample size. **The common choice is typically of 80%.** While $(1 - \beta)$ denotes power, β represents the probability of a type-II error – not detecting a difference when one actually exists. Most literature uses a β cut-off of 20%, indicating a 20% chance that a significant difference is missed.
- Hypothesised difference (d): This is the treatment effect size we aim to accurately detect between SBLP participants and non-participants. The smaller the difference to be detected, the larger the required sample size. Since the difference is measured in absolute terms, its scale differs per type of indicator under analysis. Testing different scenarios for multiple levels of hypothesised differences is a good practice.
- Population variance (σ^2): The variance reflects how heterogeneous the population is. The more heterogeneous the population is, the larger the required sample sizes. Samples of the population allow us to infer about the population variance, however this factor is unknown prior to the study. Therefore, running simulations for multiple levels of variance and assessing the resulting required sample sizes is a good practice.

Based on the aforementioned factors, we can use the standard formula to compute sample sizes. Since the hypothesised differences and population variance are dependent on the type

of indicator, we use a Likert-scale type of indicator as an example, where values can range between 0 and 5. This is because we expected to collect a large number of indicators using this type of scale in our primary research.

Table 19 presents examples of possible scenarios for different hypothesised differences and population variances, holding minimum confidence level at 95% at a power of 80% – the values commonly used in the literature.

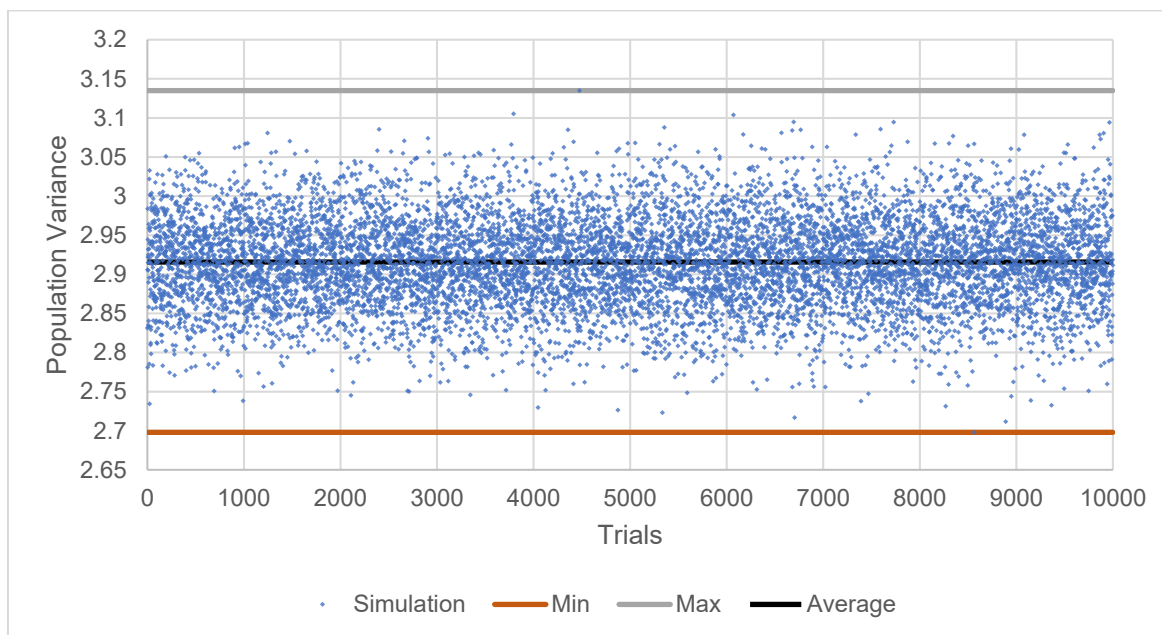
Table 19: Examples of sample size scenarios

Hypothesised difference Population Variance	Hypothesised difference		
	0.75	1	1.25
2.7	Sample size: 75	Sample size: 42	Sample size: 27
2.8	Sample size: 78	Sample size: 44	Sample size: 28
2.92	Sample size: 81	Sample size: 46	Sample size: 29
3	Sample size: 84	Sample size: 47	Sample size: 30
3.13	Sample size: 87	Sample size: 49	Sample size: 31

Note: Minimum confidence level hold at 95% and power at 80%, sample size denotes the minimum number of observations per group (treated/control).

We test being able to detect statistically different means when the difference between beneficiaries and the control group is at least 1.25, 1, or 0.75. The choice for the different levels of population variance was informed by a Monte Carlo simulation analysis, where we ran 10,000 trials/simulations with a population of 2000 subjects randomly choosing a value in a Likert-scale question (value between 0 and 5). The minimum variance of all the trials was of 2.7, the average was of 2.92 and the maximum was of 3.13 (Figure 10).

Figure 10: Monte Carlo simulation for population variance



Based on the discussed assumptions, in order to detect a statistically significant difference between the treatment and the control groups, **we estimated that the minimum required sample size varies between 27 and 87 observations per group**. Improving the statistical quality of findings for different strata would require surpassing these minimum values.

Appendix F: Questions from Management and Expectations survey (MES) used in this study

As outlined in Section 2, our baseline and six-month post completion survey tools asked respondents four questions that feature in the ONS Management and Expectations Survey. This were as follows:

Which one of the following comes closest to the approach your business generally took when problems with your service provision arose?

Examples: Slow or late delivery of service, a piece of technology breaking down.

- We resolved them but did not take further action
- We resolved them and took action to try to ensure they did not happen again
- We resolved them and took action to make sure that they did not happen again, and had a continuous improvement process to anticipate problems like these in advance
- No action was taken

How many key performance indicators are monitored within this business?

Examples: Sales, cost, quality, customer satisfaction, timely service delivery, waste.

- 1-2 key performance indicators
- 3-9 key performance indicators
- 10 or more key performance indicators
- No key performance indicators

Which one of the following best describes the main time frames for achieving targets within this business?

A target is a goal or objective that has been set by a business to achieve and is often related to financial or sales performance. Examples of targets are: rates of on-time delivery, value of sales.

- Main time frame was less than one year
- Main time frame was one year or more
- Combination of time frames of less than and more than a year

- No targets

Approximately what proportion of managers and non-managers within this business had a performance review?

- All
- More than half but not all
- Around half
- Some but fewer than half
- None

Appendix G: Phase 1 report

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