O'HERLIHY & Co. Ltd.
MANAGEMENT CONSULTANTS
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Review of Digital Scotland Business Excellence Partnership – Business Programme

Final Report

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Contents Page

Executive Summary

This report presents the findings of a review of five of the six Digital Scotland Business Excellence Partnership (DSBEP) suite of projects for Scottish Enterprise on behalf of DSBEP partners. The review was undertaken by O'Herlihy & Co. Ltd between September and December 2016. A total of 151 firms were interviewed.

The rationale for the intervention was framed by the *Scotland's Digital Future, A Strategy for Scotland* and confirmed by the analysis of the DEMI Survey which showed that over 80% of firms scored 50 or less out of 100. Scottish Enterprise was appointed by The Scottish Government to manage a budget of £7 million to support activities that would enhance SMEs Digital competencies and this led to the Partnership designing five separate interventions:

- Digital Boost
- Digital Vouchers
- Cyber Resilience Vouchers
- Digital Tourism
- #hellodigital!

E.1 Observations on firms' engagement

Firms' engagement was strong. None of the firms in the sample questioned the role of digital technologies, the need for the firms to adopt them or whether they should be taking action. Where challenges were noted, they tended to be around: Understanding *how to identify* the technologies appropriate for their business; Understanding how to make best use of Digital Technologies; Accessing the resources to help them take action to incorporate appropriate technologies within their business.

Accessing resources and developing capacity were particular issues for Digital Boost and some Digital Tourism/#hellodigital! firms. This feedback may have been influenced by the scheduling of the five individual projects – Digital Boost, while including 1-1 support, did not provide firms with a resource to help them implement any form of change. Rather it directed firms to the areas they needed to address. While this was extremely valuable for firms, it was not always enough for them to take action. The logical scheduling of DSBEP projects would have seen Digital Boost,

Digital Tourism and #hellodigital! launch be largely implemented first with Digital Vouchers, Cyber Resilience Vouchers and to an extent, the intensive elements of Digital Tourism coming later. The fact that this did not happen in practice may explain this aspect of the firms' feedback.

E.2 The influence of the Projects on firms' activities

Significantly 91% of firms in our sample cited the availability and use of digital technologies as being either *very important* or *essential* (two thirds of firms said it was "essential").

All DSBEP projects (especially those incorporating Vouchers) had an attributable impact on firms' actions. Those who attended Workshops (Digital Boost, Digital Tourism, #hellodigital!) commented on the high quality of the events and also cited action they had taken as a result.

In terms of digital technologies used, **Websites** were the most frequently cited (98%) followed by **Social Media** (94%). **Cloud based services** were used by 70% respondents (typically DropBox but also Google Drive, e-designers, iCloud). **Analytics**, when cited, were virtually all associated with maximising the value of the adoption of website rankings and social media.

There were notably fewer firms embracing other digital technologies **(Mobile technologies,** and **Business functions and management software**). Where these technologies were cited, their adoption tended to be by those who had received Digital Voucher support.

A key observation is that while firms were aware of the potential importance of digital technologies, their challenges were: Obtaining appropriate expert advice on how best to use technologies within their businesses; Creating or acquiring an appropriate level of resource to support digital technologies' adoption.

Projects improved firms' confidence in decision making. They were assessed as being highly additional – firms would not have acted in a similar way had they not participated.

Workshop attendance and 1-1 support[1] led to a significant level of action by firms across all of the projects. Respondents indicated that 1-1 support was good for answering or addressing a specific question they might have had relating to their business. The #hellodigital! participants who took a subsequent action tended to be those who came to the seminar with a specific challenge for which they were seeking an answer. The influence of workshops on actions was surprisingly positive. Projects with Voucher elements are particularly effective in this regard too.

E.3 The impact of the Partnership

Impact of the Partnership on Co-operation

Consultees were clear that the Partnership had a significant impact on co-operation between members and virtually all felt that the correct organisations and representatives were engaged in it. There was a consensus that the Partnership worked well and that it should continue.

Impact of the Partnership on Co-ordination

There was less consensus on the extent to which the Partnership had facilitated improved co-ordination of delivery across the Partner organisations. This was principally due to non-SE members of the Partnership viewing its project appraisal approach as being unduly complex.

E.4 Insights on delivery to date

This was a complex initiative and a first for many of the Partners – it took much longer than anticipated to establish the projects. While this was viewed as frustrating, in hindsight it was accepted that the appraisal process was helpful. That said, there may be benefit in looking back at appraisal and procurement approaches to see if they might be shortened if faced with a similar challenge again.

All five projects have been implemented as planned to greater or lesser extents:
We appreciate that the scheduling of projects did develop as originally intended. It was recognised that it would have been more appropriate for the projects that

[1] 1-1 input for #hellodigital! comprised circa 1 hour dialogue with the seminar leader, so was less intensive to that provided through Digital Boost

focused on helping firms to identify where action might be of benefit should precede those providing financial resource to help the firm to take the actions.

Recommendations for the Partnership

Recommendation: The Partnership should continue to meet and operate after March 2017 when current funding ends.

Recommendation: If the Partnership considers further projects targeted at the "volume" market, SE should explain the use of "Stage Gate" appraisal processes to partners and use the feedback captured through this review to show its value to designing robust and relevant projects

Recommendation: When designing future interventions, the Partnership should adopt a "co-development" approach to their design.

Recommendation: If repeating a similar approach again, the Partnership should give early thought to the method of employing members of a Project Office so that their contractual arrangement is as straightforward and streamlined as possible.

Recommendation: Standardised procurement and delivery approaches should be adopted across Scotland where possible and appropriate.

Recommendation: If repeating a similar approach again, the Partnership should endeavour to schedule "audit" type programmes before measures that provide financial assistance to firms to support their digital actions.

E.5 Project Summaries

The sections below provide Project specific observations.

Digital Boost - Key Findings

The feedback suggests that firms principally benefitted from their attendance at Workshops or through the 1-1 inputs.

For Digital Boost 1-1 support, there was difference in the feedback from SE and HIE areas. Commendium (SE) adopted a relatively structured and consistent approach to their 1-1 activity that firms described as being tailored to their specific needs - satisfaction was relatively high. For HIE firms (PA Lead Contractor with project

delivery being subcontracted), the inputs were described as being less intense, "high level" and "non-specific"- Satisfaction was lower.

The support in SE's area led to most firms taking actions to date. Firms also planned to take notable actions in the future. The HIE support generally did not lead to attributable actions being taken, but in some cases, firms did plan on taking a future action.

Recommendation: If tendering a similar project, the Partnership should consider excluding consultants' travel time from the three days allocated to firms.

Recommendation: Actively promote the value of Workshops to firms and encourage participation that is independent of 1-1 support.

Recommendation: Highlands and Islands Enterprise should review the scope and intensity of the 1-1 support that is offered to firms in the region.

Digital Voucher Programme

Beneficiary firms were mainly micro businesses and vouchers were generally for 75% of total cost of project, and often but not always to the limit of £5,000. Most projects focused on creating new websites with ecommerce where appropriate. There was also a strong focus to introduce/bring firms up to speed with social media.

Outputs varied. Many firms stated the completed website was the end of the project – this would seem appropriate given that vouchers were designed to help firms take action. Scottish Enterprise support led to most firms taking actions, but there is a lot of linked activity planned for the future - in many cases the work that has been done under the Voucher was so central to the firm that they needed time to bed the new systems in and cope with increased traffic/sales before moving on to next phase.

The activity/changes were practically all attributable to the support received, which will generate a high degree of impact. In most cases the additionality was significant: the firm either would have done nothing without the support or would have "tried to do something but it would have been less effective" - usually in-house, or only being able to afford less specialised support to enhance rather than rebuild the website. And it would have taken longer.

The predicted impact was large, with the main benefits being increases in sales, improved and more professional image, wider geographic market reached (including international). Many firms have a continuing relationship with the specialists, paying them to provide further support once the Voucher funded input has been delivered.

Overall, there was extremely positive feedback about the Voucher support and experience - almost all firms were happy to recommend the support to another firm. Digital Vouchers were very well received and delivering important support that will generate significant impact for the beneficiary firms.

Recommendation: Record Smart Objectives categorisations when approving projects for funding.

Cyber Resilience Voucher Programme

Firms were generally were *not* responding to or addressing a specific security breach or attack. Most of the assisted firms used the Voucher's accreditation to boost their brand image. A few firms availed of the Voucher as they had a tender or client who required it.

Most firms said they liked the fact that an objective third party could evaluate their existing systems and recommend improvements. Some firms liked the fact that they now have a security policy which they can communicate to staff and customers and this improved their professional image.

Firms would recommend the Vouchers to other companies. The additionality of support was high with almost half of respondents indicating they wouldn't have taken any action had the cyber voucher not been available

Companies used digital technologies within their businesses to different levels of intensity. All rated digital technologies as essential or very important to their businesses.

Digital Tourism

The Digital Tourism project comprises a comprehensive suite of support that will be delivered up to June 2018 (15 months longer than the other projects). We assessed Digital Workshops as they were the principal element that had been implemented to

date. Most firms learned of the workshops through a Destination Management Organisation. Almost all found workshops useful and would recommend them to others. Few firms have used Digital Scotland on-line resources but those who did found them valuable.

Overall, workshops were highly rated. As with #hellodigital! events, the feedback highlighted the mixed ability of those attending suggesting that a "Traffic Light" indicating required skills levels would be useful for future workshop offers.

Almost all firms complained about poor (slow, intermittent) broadband provision. Almost all firms are using social media and those who aren't know they should be but don't have time. Some firms have used Facebook Ads to good effect – it might therefore be worth offering a dedicated workshop addressing online advertising that covers Adwords, Twitter etc.

Few of the firms have a strategy as such but all plan to do more. Most firms use the cloud but mainly just to store files or for email (Dropbox, Office 365 and Google Drive). Use of Data Analytics is limited to monitoring website traffic (using Google Analytics mainly).

Recommendation: Consider introducing Digital Marketing workshops for firms.

Recommendation: Introduce a "Traffic Light" coding for workshops provides participants with an insight on the level of technical ability required.

Recommendation: Push on with implementing the project's "intensive" 1-1 measures so as to maximise the likelihood of achieving all KPIs by June 2018

#hellodigital!

While individual participation numbers are very high, a very significant proportion were repeat attendees so the number of organisations represented is much lower – this indicates that participants are deriving value through their attendance (as they keep coming back). There was positive feedback on the events' content and value. There is an opportunity to run school-specific events.

Firms suggested that a Traffic Light coding system (representing required technical understanding) would be valuable in helping potential attendees to decide which events would be appropriate for them to attend in future.

All who received 1-1 post event support had a specific issue to discuss. Virtually all of those who received 1-1 support took an action as a result. A surprisingly large number of those interviewed were taking action solely as a result of their attendance at the workshops.

Those attending the higher technological content events (Google, IBM etc) tended to be harder to please mainly because they already had a good understanding of the topics and were more critical in the assessment of their contents.

Firms felt the project provided Highlands and Islands businesses with exposure to experts whom they would not reach otherwise (without travelling to London or other metropolitan cities) – this is a key aspect of its added value. Firms liked the fact that #hellodigital at An Lochran was nice venue and a good facility to have in the Highlands and that it added value. Several quoted of #hellodigital "This is a good way for HIE to spend its money".

Recommendation: Introduce a "Traffic Light" coding for workshops provides participants with an insight on the level of technical ability required.

E.6 DEMI score for the DSBEP Sample

DEMI scores were calculated on a firm by firm basis and they are consistently higher across the sample. Some caution needs to be applied when interpreting these changes: the DEBS survey of 2014 engaged 4,002 firms while our review engaged 151; our review sample may not be representative of the population of Scotland's firms as they may have been more motivated to seek external help due to being more digitally aware; (some of) the improvements are due to inputs the firms have received through DSBEP Projects. These caveats aside, firms indicated that that the DSBEP support had a significant impact on their *social media* and *data analytics* usage in particular and less, but notable, impact on other digital technologies. Digital Vouchers had the most significant impact on firms' *internet based sales.*

E.7 Digital Skills needs

Firms gave conflicting feedback in terms of skills. Most identified notable skills constraints but few were intending to train existing employees as a consequence –

rather they would either recruit those with the required skills in future or "buy-in" specialist inputs when needed.

Broadband connectivity

Poor or unreliable bandwidth is a fundamental issue and key finding of this review as firms indicated when covering the DEMI questions that there was no point in them considering the adoption of more sophisticated digital solutions such as cloud-based services, on-line CRM, VOIP or video-conferencing as their internet connection was not sufficiently robust for them to able utilise these technologies consistently.

We suggest that any future incarnation of the Partnership should have improvements in broadband provision as a key priority.

Recommendation: Provide feedback to Scottish Government Infrastructure Directorate on the experiences of businesses attempting to access reliable broadband and the fundamental challenges our research suggests they face.

Recommendation: Consider specific packages to support firms' skills recruitment and enhancement.

Overall Assessment

This review of five elements of the Digital Scotland Business Excellence Partnership's project activity highlights high levels of satisfaction across a very broad spectrum of business support interventions. It is clear that all elements of the DSBEP offer were additional and led to firms taking appropriate actions to enhance their digital presence. As would be expected, the Voucher-based projects were most notable in this regard. The improvement of DEMI scores was particularly striking. This feedback provides a degree of quantitative evidence on the uplift in value derived by assisted firms.

Based on both the consultation feedback and the survey evidence from firms, the activities of the Partnership appear to have been very effective and have clearly contributed to improving the digital competitiveness of firms that were engaged.

1 Introduction

1.1 Introduction

This report presents the findings of a review of five of the six Digital Scotland Business Excellence Partnership (DSBEP) suite of projects for Scottish Enterprise on behalf of DSBEP partners. The review was undertaken between September and December 2016.

1.2 The Digital Scotland Business Programme

In 2011, the Scottish Government published *Scotland's Digital Future, A Strategy for Scotland* that identified the potential contribution that digital technologies could make to the increased productivity of both the public and private sectors and the economic performance of Scotland. It identified specifically the "critical role that Scotland's Enterprise Agencies would play in helping to deliver a world-leading digital economy".

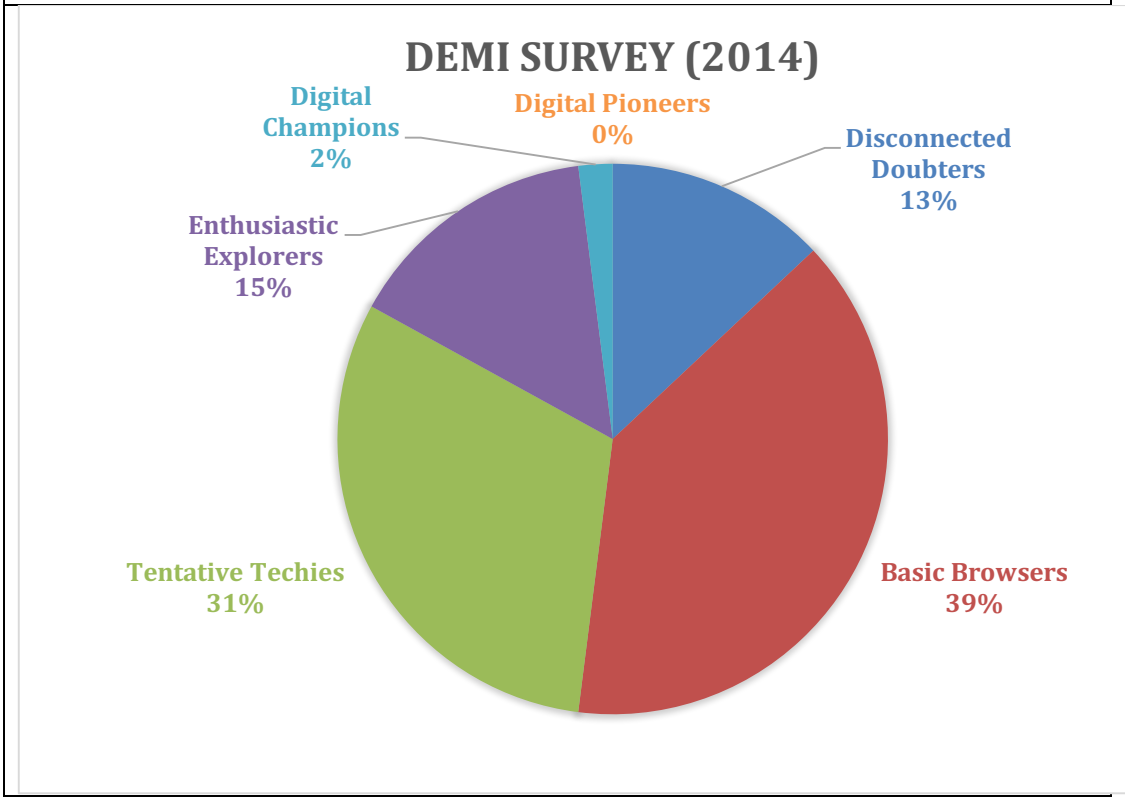
Effectively, given the publication of the strategy, the rationale for the DSBEP Business Programme can be assumed to have been already established through the evidence gained for its production – normally, SE would have to build the business case for such activity but in this instance, that has already been done (the strategy set out explicit roles for SE and HIE in its implementation).

1.2.1 Digital Economy Maturity Index (DEMI)

The Scottish Government has a vision for all businesses in Scotland to have access to digital infrastructure, and to have the confidence and skills required to embrace the internet and digital technologies. Whether large or small, working in agriculture or in the business activities sector, this would enable all businesses to make optimal use of digital technologies as appropriate for their specific sector, size and geographical location. Using data from the Digital Economy Business Survey 2014 (DEBS), the Scottish Government developed a Digital Economy Maturity Index (DEMI), which allows for the segmentation of businesses in Scotland according to their level of digitisation (See Appendix 1 for the DEMI scoring matrix and categorisations).

The findings of the DEMI research indicated that there was a clearly defined need amongst firms that must be addressed if their competitiveness is to be maintained or enhanced and it clearly points to the opportunity to improve Scotland's current standing (Fig 1.1).

Fig 1.1: Distribution of DEMI scores by group



The analysts grouped the respondents according to their level of digital engagement:

- Disconnected Doubters (13%) do not see the need to go online or use digital technologies as they do not see how it could benefit the business (one third do not have an internet connection) – these firms tend to have been established for over 10 years, expect not to grow and have an annual turnover of less that £100,000
- Basic Browsers (39%) tend not to consider technologies as being important to the running of the business and do not think that technologies are of any relevance to the business – 84% are micro-businesses that have been established for over 10 years, expect to remain the same size or to grow modestly (less than one in ten exporting) and who have a turnover between £50K and £250K.

- Tentative Techies (31%) consider technologies to be important to the current running of their business but tend not to see the full potential of how technologies can benefit the business – this group tends to have a standard broadband connection, have been established for over 10 years, have started to export and expect to grow moderately or remain at the same size over the next 12 months and have an annual turnover of between £50k and £250k
- Enthusiastic Explorers (15%) consider technologies to be very important to the running of their businesses – have the greatest representation of large businesses, tend to be exporters, have been established for over ten years, expect to grow moderately or remain the same size and have an annual turnover of between £50K and £250K
- Digital Champions (2%) see technologies as being essential to the running of their businesses – they are likely to be exporters, be younger (established 3-10 years), expect to grow moderately or substantially in the next 12 months and have a turnover of between £250k and £1m.

The data presented in Figure 1.1 indicates that just over 4/5 are either *Disconnected Doubters, Basic Browsers* or *Tentative Techies* with the latter having the highest DEMI score of up to just 49/100. This indicates that there is significant scope to increase firms' positioning. The data also shows that:

- 3/4 have a website – so a quarter do not
- 2/3 have adopted mobile technologies
- half have engaged in social media
- but just 1/3 have used data analytics
- and only a quarter use cloud computing.

These data suggest that there would appear to be a significant opportunity to encourage firms to make more use of analytics – especially if they are using the web to promote their business. Analytics services provided by Facebook, Twitter and Google Analytics allow powerful and deep insights for no/modest outlays that can help firms to target their marketing effort more effectively.

The Digital Scotland Business Excellence Partnership was created by the Scottish Government as a mechanism to assist the implementation of the strategy and to address specific perceived weaknesses in the adoption of digital technologies by

firms in Scotland. It was allocated a £7m budget[2] and was to have a particular focus on extending the reach of business support to more Scottish SMEs.

Table 1.1 The DSBEP Suite of Projects

Project	Aims	What it does	Lead Partners	DSBEP Funding
Digital Boost Programme	Raise awareness and extend reach of Digital Economy	Promotional activity, on-line diagnostic tools, workshops, events, 1-1 support	SE, HIE & BG	£2.8M
Digital Voucher Scheme	Improve digital capability	Voucher (75%, £5k max) to support consultancy and implementation activity	SE, BG	~£2M
Digital Tourism Programme	Increase growth, profitability and quality through improved skills, digital capability and confidence to invest	On-line diagnostics, workshops, 1-1 support	SE, Scottish Tourism Alliance, VisitScotland, HIE, BG	£650K
Cyber Resilience Programme	Raise awareness of opportunities to improve cyber resilience via cyber security strategies	Online Cyber Toolkit, Cyber Resilience Voucher Scheme and workshops	SE	£466K
Digital Excellence Centre (#hellodigital!)	To act as a showcase of potential new digital technologies	Physical facility located in Inverness - Augmented Reality, drones, 360 video creation, IOT	HIE	£306K DSBEP+ £34K HIE
Supplier Development Programme [Evaluated 2015]	Facilitate SMEs and 3rd sector organisations tendering for public contracts	As the project was evaluated in 2015, it was not included in this review	Local Authority Consortium	£360k

The DSBEP Business Programme involves the delivery of six projects as set out in the Table 1.1. The Supplier Development Programme is well established, covers many aspects of supplier development activity and had a digital procurement element introduced relatively recently. It was not included in the suite of projects reviewed here as it was subject to a formal evaluation in 2015. However, the Programme Manager was consulted as part of our review.

The DSBEP suite of projects, termed the Business Programme, has been delivered over the past three years. They were designed to act as a bridge in the period while digital support and advice was prioritized and mainstreamed across Partner organisations. It will be seen in the report that the Partnership was responsible both

[2] A further £6m was allocated to Skills Development Scotland to address specific digital skills gaps and weaknesses

for identifying where resources might be invested and for appraising project proposals put forward.

The Business Programme activities have four principal aims, namely to:

- Achieve wider penetration in the adoption of digital technologies
- Be of national benefit
- Be additional to core agency activity through using smarter partnership working to achieve delivery
- Take forward recommendations identified by the Partnership.

There were four thematic objectives of the Business Programme, namely to:

- Change culture – particularly amongst SME leaders
- Raise awareness – benefits and marketing opportunities for firms
- Provide advice – on how to make better use of digital technologies to achieve business objectives and avail of market opportunities
- Support investment – by firms on digitally related assets and activities.

Table 1.2 below provides a summary of the anticipated distribution of funds across the four themes. It can be seen that Supporting Investment and Cultural Change were to receive the two highest contributions.

Table 1.2 Project activity and funding by Support Theme

Programme Support Theme	**Project Activity**	**Funding**
Changing Culture	Promotional Campaigns; Social Media; Intermediaries	c£2.0m
Raising Awareness	Events; Workshops; Online; Webinars; Showrooms; etc	c£1.5m
Providing Advice	Masterclasses; Online; Advisers; etc.	c£1.0m
Supporting Investment	Voucher Schemes; Diagnostic Tools; Action-planning	c£2.5m
	TOTAL	**£7.0m**

1.3 Aims of Evaluation

***The DSBEP Business Programme was partially implemented at the time of commissioning. The focus of this assessment exercise is to review progress to date and the learning points that can be concluded on its operation and delivery*.** Given that SE played a role in leading the Partnership, in appraising project activity and in introducing governance procedures, there is a specific chapter on consultees' feedback which aims to capture observations and learning points on these activities.

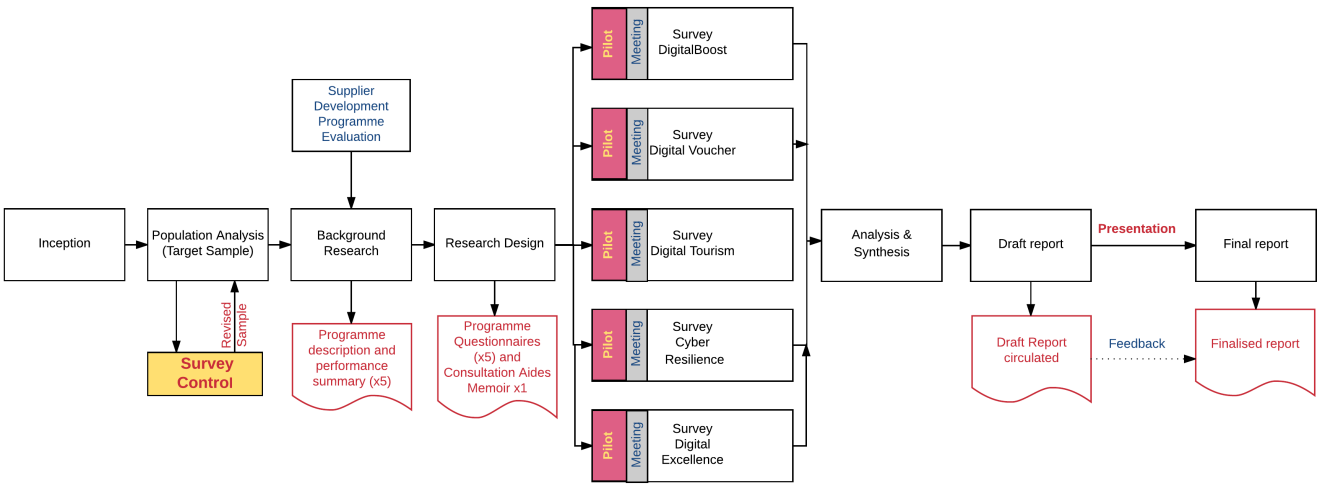
Thus, the aim of this review exercise is to undertake an assessment of the DSBEP Business Programme that:

- Provides Scottish Enterprise and DSBEP partners with comprehensive intelligence on the performance of the suite of projects comprising the Business Programme that have been delivered to date and provides recommendations on future activity
- Gathers robust, representative and comprehensive information from beneficiaries that identifies how the DSBEP interventions have influenced their understanding of digital technologies and the benefits they can derive through their adoption
- Identifies the extent to which the creation of the Partnership has facilitated cooperation in the delivery of digital support services to SMEs
- Applies critical thought when analysing the findings so as to identify deep insights into the operation of the Projects.

1.4 Methodology

Figure 1.2 sets out the process we followed when undertaking the review.

Figure 1.2 DSBEP Review Process



For our Partner consultations, a total of 14 consultees were interviewed, each with a specific responsibility either for the approval of expenditure or management of the individual projects. The consultee list is presented in Appendix 2.

The sample of firms interviewed for each project is presented in Table 1.3 below.

Table 1.3 Sample Selection

Project	Number of firms after Survey Control	Number of unavailable firms (email returns, no tele numbers or declined etc)	Net Available Interview population	Total Interviews
Digital Boost 1-1	98	25	73	27
Digital Vouchers	135	24	111	56
#hellodigital!	130		130	22
Digital Tourism	77	14	63	25
Cyber Resilience Vouchers	48	5	43	21
Total Interviews completed				**151**

1.5 Report Structure

The remainder of the report is structured as follows:

- Chapter 2 – Consultation Findings
- Chapter 3 – Digital Boost Review
- Chapter 4 – Digital Voucher Review
- Chapter 5 – Cyber Resilience Voucher Review
- Chapter 6 – Digital Tourism Review
- Chapter 7 - #hellodigital Review
- Chapter 8 – Digital Economy Maturity Index (DEMI)
- Chapter 9 – General Observations
- Chapter 10 – Conclusions & Recommendations.

2 Consultation Feedback

2.1 Introduction

The list of consultees engaged is contained in Appendix 2.

2.2 Timing of this review

Due to the different timescales of the individual projects comprising the Business Programme, this review was undertaken partway through the delivery of three projects:

- Digital Boost – The Workshop programme was established while the 1-1 support delivery was being launched.
- Digital Tourism, workshops are being delivered but the 1-1 element has not yet started – this Programme completes in June 2018, unlike the others which complete in 2017
- Cyber Resilience Vouchers has seen the training of advisors completed and the first round of Vouchers had been awarded.

Progress against target for Digital Vouchers was well ahead of profile as was individual participations[3] for #hellodigital! in the Highlands and Islands.

2.3 Strategy

The 2011 *Scotland's Digital Future, A Strategy for Scotland* was the over-arching strategy that informed the design of the five projects. It is clear from consultees' feedback that the strategy had influenced activities in SE, HIE and Business Gateway prior to the creation of the DSBEP. Thus, the DSBEP Partner organisations were aware of the strategy and appear to have been actively thinking of actions they might take in order to contribute to its implementation. The Scottish Government Digital Strategy 2011 led to the HIE and the Business Gateway Partnership to introduce a Digital Business Support Programme on the back of the roll-out of Next Generation Broadband across the Highlands and Islands. This was a £146m roll-out led by HIE. In addition, HIE also led the Business and Community Engagement Programme,

[3] There was a very significant number of repeat participations

launched in June 2012 and funded through an award of £1M from The Scottish Government. From 2014-2015, HIE fully funded Digital Engagement while the design of the national programme was being refined. They attracted EU funding for this activity.

The production of the DEMI profiles based on the 2014 Scottish Business Survey provided an impetus for action as they highlighted the comparatively poor digital adoption amongst most small and micro businesses. While there was a shared recognition of a need to act, some initial time was taken to share and align individual organisational aims and objectives and the early role of the Partnership was to assist in this process.

2.3.1 Strategic Fit

The strategic fit of the five Business Programme projects was considered to be good. There was limited overlap and the individual project managers were well briefed on what other project managers were doing.

In terms of the responsibility for the Business Programme within the Scottish Government, it was considered to have quite a different purpose when compared to other business support interventions within the Government's portfolio. That said, the importance of digital as a cross cutting theme was recognised.

Wider digital and DSBEP strategies were considered to be well aligned. The focus on Digital was also considered to fit well with the Scottish Government's focus on internationalisation, innovation and (digital) inclusion.

The view of a good strategic fit was not limited to public sector partners. Our consultation with the Federation of Small Businesses highlighted their focus on improving broadband provision and the threat of cyber crime – two of the FSB's high ranking priorities. The FSB also undertook a review in 2015 that identified the importance of digital technologies in helping small firms to identify new business models which supports a separate FSB priority message to its members that 'change is coming so firms had better adapt'. This project complements the Next generation Broadband project in the Highlands and Islands. The FSB has proactively contributed to the Ofcom Strategic Review of Digital Communications.

There was an awareness amongst consultees that the Partnership was at the start of a journey and that the DEMI findings confirmed that there is a very significant amount of work to do. Thus, this will be a longer term process and may take 3-5 years from now before tangible results are seen. From our perspective this is an interesting observation as it will be seen later (Chapter 8) that the DEMI profile of firms participating on the DSBEP Business Programme is very different to that of the population of firms interviewed in 2014.

2.4 SE's Role

Playing a lead role in the development and management of business support projects targeted at small and micro businesses was not something that SE had typically done previously, especially not for digital interventions and at the volumes supported here. Scottish Enterprise's product offerings are mostly designed for Account Managed firms, and are delivered in comparatively small volumes when compared to those offered through the Business Programme to, for example, Business Gateway's target clients. Scottish Enterprise was therefore breaking new ground in this regard.

While the Scottish Government brought the Partners together and requested that SE take the lead in managing the implementation (as broadly reflected in the 2011 strategy document), it did not provide specific guidance for how the funds should be spent or what types of activities they should be spent on. Instead, they left this to the partners to agree. Scottish Enterprise's Stage Gate Appraisal Process was adopted for all projects.

2.4.1 SE's Project Appraisal Process

Scottish Enterprise saw its role as being to mobilise the Partnership to identify the project areas that would have the greatest impact on economic performance, to apply the appropriate appraisal procedures to ensure that the project design and delivery was sound and then to apply appropriate Governance processes to ensure that the projects were delivered appropriately. Appendix 3 presents a diagrammatic of the Project Development Process that was adopted.

All Partnership members were encouraged to come forward with ideas and these were then put through the process. A key point to note is that all of the DSBEP

projects were subject to the SE Stage Gate Approvals process which is thorough and can take a relatively long elapsed time to reach "approval status", especially if re-work of submissions is required.

Once funding approval was granted, some of the DSBEP Projects' were of a scale that required formal OJEU tendering processes to be followed which further added to the delivery timescale. There was a general view amongst non-Scottish Enterprise consultees that the combination of the appraisal and procurement process introduced significant delays in delivery. These consultees suggested that this aspect could be improved if the Business Programme was being designed again.

While SE saw its role as being to appraise projects and adopt appropriate governance processes, other partners, in particular Business Gateway, found the pace of the approvals process in particular to be frustratingly slow. Our consultations with Business Gateway suggests that they felt the need had been identified through research for the Strategy and in the subsequent DEMI analysis and that the Partners therefore had a remit to proceed promptly in delivering support to firms. The Federation of Small Businesses consultee also noted that the progress from initial project specification to delivery of support was very slow and that the project appraisal process appeared very, if not overly, complicated. Non-SE consultees questioned whether such a detailed appraisal process was appropriate for the task on this occasion.

We consider that the observations on appraisal above should be seen within the context of the reality that SE was working to a combination of HM Treasury Green Book guidance, OJEU tender rules and SE's Project Lifecycle process while also being explicitly tasked by The Scottish Government to apply these processes to the DSBEP expenditure to ensure that it was targeted effectively. We understand from our consultations with The Scottish Government that the robustness of SE's appraisal processes was a key reason SE was chosen by the Scottish Government to co-ordinate the Programme's delivery.

In hindsight, the FSB and other partners considered that while the projects took longer to launch than anticipated, their designs were very good (reinforcing the value of the project appraisal and development process that was used). That said, they felt there

were opportunities to deliver more on-line. The distributed model and local delivery (in each Local Authority area) introduced potential variability in the offer. From firms' and the Scottish Government's perspectives, this is likely to be sub-optimal – all firms should have access to the same level, type and intensity of support.

There was recognition that this would be a time bounded (three-year) intervention by Scottish Enterprise. The Scottish Enterprise consultees were clear that this was an unusual project in that they were responsible for leading the project design and appraisal process and for reporting on KPIs, but were not responsible for the achievement of outputs.

2.5 Partners' perspectives

The concept for a Business Programme addressing digital technologies originated within the Business Gateway National Unit following discussions with operational Partners. These conversations coincided with the formation of DSBEP and the Scottish Government allocating funding to Scottish Enterprise and Skills Development Scotland.

Highlands and Islands Enterprise had implemented a 3-year Digital Engagement Programme and was keen to build on its experience. The DSBEP project built on learning from HIE. However, during delivery it became apparent that HIE had a different style of working to Scottish Enterprise and Business Gateway. Thus, approaches to delivery were not always transferable.

There was a view that the right organisations were represented on the Partnership. The Partnership was considered to operate very well, with good levels of communication between representatives.

All of the consultees representing organisations on the Partnership Board noted that, at the start, there were different views on how the Partnership might operate and the types of project activities it might support. This reflected the gestation of the DSBEP – the concept had been seeded by the Government's Strategy Paper in 2011 and the Partners had been developing their thoughts in the meantime. While these differences existed, all consultees noted that the Partnership reached a consensus very quickly

on the optimum way forward. This is a positive finding and points to effective group working.

The Partnership met once per fortnight for the first 10 months, then monthly thereafter. A key role for the Partnership was to test evidence of demand and ensure that the gaps being addressed were valid.

2.6 Programme evolution

The Partnership worked together to agree the six projects that would be pursued. At the outset, there was a logic to the timing of the projects' delivery:

- *Digital Boost* (workshops and 1-1 support), #hellodigital! and the workshop element of *Digital Tourism* were designed to promote awareness of digital technologies and how they could be of value to firms and stimulate them to take appropriate action
- *Digital Vouchers* and *Cyber Resilience Vouchers* were designed to provide financial assistance to help firms to take action in specific areas – For Digital Vouchers, there were specific targets for the *adoption* of e-commerce and digital services for business and international growth, *implementation* of ICT systems for business improvement efficiencies and *development* of new digital services resulting in increased sales and reduced costs.

At the outset (2014) it was anticipated that the "demand stimulation" activities, specifically Digital Boost, would launch first and that the voucher based projects would be offered subsequently. In reality, implementation did not follow this logical progression, as the Digital Boost approval process took much longer to implement than anticipated. There were several reasons cited for this:

- Digital Boost aimed to support the core Business Gateway client group – Business Gateway contracts are tendered by each Local Authority and it took longer than anticipated to acquire company contact information from each delivery organisation
- The scale and reach of Digital Boost required that it be tendered on OJEU
- Individual Business Gateway organisations wished to ensure that local contractors were included in the tender process

- HIE had commenced promoting Digital support services to their client firms and wished to utilize elements of this design in the national project
- There were two operational models, one each for Lowland and Highland Scotland – Lowland Scotland had four available contractors while in Highland Scotland, the delivery was provided through PA Consulting who had previously been awarded the contract for HIE's business support services in the region.

Consequently Digital Vouchers and Digital Boost effectively ran concurrently. It would be seen later in the feedback from Digital Boost firms that they voiced a desire for follow-up resources to help them implement actions identified through the initial consultancy.

2.7 ERDF funding

It was anticipated at the outset that Local Authorities would apply for ERDF funds to help continue delivery of the programs within their areas. We understand that Dumfries and Galloway Council made an application but that other Council areas were not proactive. This raises a question as to how the DSBEP activity will continue to be supported by Business Gateway delivery organisations within their respective Local Authority areas.

2.8 Programme Delivery

In recognition of the longer lead times required to design, appraise and procure the delivery, the Scottish Government extended the project term from two years to three with all elements of the DSBEP Business Programmes due to be delivered in March 2017.

Digital Vouchers were considered to be a notable success in terms of take-up. The initial request was for funding to support 240 projects. In reality, demand was much greater, with the final target (achieved through separate funding requests) of 540. This was seen as providing clear evidence of the latent demand for digital support interventions. Success was maximised by maintaining strict eligibility criteria and it will be seen later that our survey findings confirmed this view.

The Cyber Resilience Vouchers design, that incorporated training for advisors to coach them on how best to identify firms that could benefit, was considered good.

The FSB consultee (and a notable proportion of firms in the survey) commented on the lack of promotion for Digital Voucher support which they felt would attract much greater levels of demand than were originally anticipated.

The voucher was purposely not promoted more widely by Scottish Enterprise. It was targeted at Business Gateway Growth Advisory Service companies only to ensure the right type of company and project were supported. It was also accessed by Business Gateway Adviser referral only and not a first come, first served basis. In reality, demand was very strong with the final approved number of vouchers being over twice that initially proposed.

2.8.1 Programme Management

The overall funding for DSBEP included a proportion for project management which was allocated to Scottish Enterprise. Given the actual level of project management required, SE consultees questioned whether it was sufficient to cover the level of resource that was required to be invested.

2.8.2 Improvements in collaborative working

The consensus feedback was that the Partnership had increased collaborative working and improved communications across the Partners. The Partnership facilitated wider conversations on what practitioners were doing in other aspects of their non-DSBEP responsibilities – these were felt to be very useful.

It took time for the Partners to build an understanding of the others' activities and strengths. While this slowed progress initially, it was felt to have had a longer term benefit – Partners now felt they understood better what their peers were doing.

While collaborative working was good, there was recognition that there is scope for greater collaboration with Business Gateway. Business Gateway co-chairs the Customer Alignment Group and there was felt to be scope to gain greater clarity and consistency on the customer definition.

2.8.3 Improvements in coordinated delivery

While there was a general view that the Partnership had helped improve collaboration, it was less clear that it had improved coordination of activities on the ground. Given that the target group comprised Business Gateway clients but with SE and HIE leading the management of the initiatives, it was felt that there was scope for better coordination of delivery.

Business Gateway and Scottish Enterprise observed that the characteristics of the Business Gateway client group are very different to those of Account Managed firms. From a Business Gateway perspective, it was felt that there is an opportunity for enhanced "co-production" of new projects in the future which would see the two organisations working in Partnership to deliver services and adopting a common approach to:

- Defining the problem to be addressed
- Appraising all options
- Identifying who needs to be involved
- Defining what each party will do
- Agreeing how services will be introduced and delivered and their associated delivery timescales.

2.9 What next

2.9.1 Future of the Partnership

Two of the consultees questioned whether the Partnership should continue after this phase of the Business Programme's delivery. While this will be dependent on the future shape and delivery of Digital support, there was a strong consensus view amongst consultees that:

- DSBEP was progressing well now that the Business Programme expenditure had been approved and that it should be supported through to the end of this funding round
- DSBEP should continue in some form as a Phase 2.

Several interviewees suggested that DSBEP was only the start of a process by which firms could be assisted and that Scotland had some distance still to travel – both

within the Public sector and the Private sector. They also felt that elements of the Partnership should be continued.

It was also noted that the 7th Strategic Theme of the recent Scottish Government Enterprise and Skills Review was 'Digital' so that there was a strategic and political rationale for pursuing activities that enhanced Scotland's digital capabilities. There was a view amongst those based at Scottish Enterprise that it would be best for another party to take a lead role. Supporting this view, it was suggested that Local Authority areas wished the support to continue and that there was also a desire for the Programme Office to continue to coordinate delivery. The Digital Boost brand has been promoted and was felt to be a good platform from which to build in the future. One consultee suggested that there is a need to expand provision considerably in order to bring Scotland's firms up to a similar standard to that of their competitors.

Our consultation with the Supplier Development Programme lead noted that this Programme's funding ends in March 2017 and at the time of interview (November 2016), it was not clear what would happen next. Without funding, the Programme would be stopped. Given the clear move towards e-tendering, it was suggested that firms would be notably disadvantaged. Of concern was the observation that a significant amount of support was required to enable firms to use their PCs to engage effectively in Supplier Development Programme Webinars. The support required was quite basic and this provided an insight into the digital competence of many firms. It confirmed the DEMI findings.

All consultees who commented on the future development of DSBEP recognised that funding would be a critical factor. We understand that the Scottish Government's support finishes in March 2017 (July 2017 for Digital Boost). Regardless of what new operating models might be considered, clearly accessible funding will require to be committed before future implementation can be considered.

2.9.2 Charging for Workshops

Traditionally, Business Gateway and Scottish Enterprise[4] have not charged firms to attend workshops. The Digital Tourism project however agreed that their Digital

[4] HIE has charged for workshops

workshops should incur a charge for attendees. This presented a significant issue for Business Gateway as it was inconsistent with their policy of providing all business support for free.

2.9.3 Summary

The next five chapters present the findings of our review of five of the DSBEP Business Programme projects. These have been presented as stand-alone summaries (chapters) and, consequently repeat some of the observations presented above where they are specifically relevant to the project's findings.

3 Digital Boost

3.1 Rationale

The National Digital Engagement Programme (NDEP) marketed as *Digital Boost* to firms was a response to the statement of challenge from the Scottish Government's digital strategy, "Scotland's Digital Future – A Strategy for Scotland" which called for proposals to accelerate the adoption of e-commerce, ICT and Digital services by companies through providing additional assistance across Scotland. It proposed that Enterprise Agencies and Business Gateway would work together to ensure Scottish businesses make best use of current digital connectivity and technologies and that they are preparing for next generation broadband access.

Despite the steady growth of digital technology, there are significant challenges to increase adoption particularly for SMEs. As cited in Chapter 1, the Digital Economy Business Survey 2014 (DEBS) surveyed over 4,000 Scottish SMEs and identified that the key barriers to adoption include a lack of understanding and skills; and resources to implement, combined with costs or lack of funds (see Digital Economy Maturity Index (DEMI) summary *Chapter 1*). Discussions at the Economic Policy committee made reference to how the DEBS data[5] highlights the potential for digital technologies and uptake to boost Scotland's international performance. Digital maturity, adoption and exploitation correlates strongly with innovation performance, exporting performance and ambition for growth. In terms of future intentions, the survey also reveals that:

- 20% of businesses intend to adopt a new technology in the next 12 months;
- 72% intend to improve some aspect of digital; and
- 75% intend to either adopt or improve their digital technologies.

3.2 Aims

The project is aimed predominantly at the Business Gateway 'potential to grow market' group of firms.

[5] Scottish Digital Economy Business Performance May 15 http://intranet.scotent.co.uk/A-z/T-

Digital Boost targets the lower segments of the DEMI groupings so as to help move businesses along the maturity continuum. The long term outcomes for companies were to raise awareness and knowledge of Digital Technology as it affects their business, to enable them to extend their reach in this area to enter new markets, trade internationally and increase business efficiencies, thereby indirectly increasing staff.

This aim of moving firms along the continuum is the baseline we have used to assess whether Digital Boost has been effective.

3.3 Programme Design

Digital Boost comprised five work packages (WP):

- WP 1 - Programme Manager and Co-ordinators
- WP 2 - Digital Services, On Line Guides and Digital Health Checks
- WP 3 - Workshops and Events (including development of material)
- WP 4 - Health Checks/Specialist Adviser Support
- WP 5 - Marketing Promotional Campaign

Our review questionnaire was designed to get feedback from beneficiaries on their awareness, usage and perceived value of the On-Line Healthchecks, On-Line Guides, Workshops and 1-1 support. It also captured the actions that assisted firms had taken, and planned to take, as a result of their engagement. These actions would inform our assessment of the extent to which Digital Boost had been effective.

By way of context and as described in para 2.3, Highlands and Islands Enterprise had implemented several digital support measures for its client firms. We understand that the Digital Boost design incorporated learning from the Highlands and Islands experience. Consultation feedback suggests that while the HIE experience provided valuable insights, SE and Business Gateway observed that the HIE's approach to support did not always transfer to Lowland Scotland.

3.3.1 SE's Project Appraisal Process

Scottish Enterprise saw its role as being to mobilise the Partnership to identify the project activities that would have the greatest impact on economic performance, then

apply appropriate appraisal procedures to ensure that the project design and delivery was sound and then to apply appropriate Governance processes to ensure that the projects were delivered appropriately. Appendix 3 presents a diagrammatic of the Project Development Process that was adopted.

All Partnership members were encouraged to come forward with ideas and these were then put through the SE Stage Gate Appraisal process. A key point to note is that all of the DSBEP projects were subject to the SE Stage Gate Approvals process which is thorough and can take a relatively long elapsed time, especially if re-work of submissions is required.

3.4 Observations on delivery

3.4.1 Programme Design

A Programme Steering Group drawn from the Business Gateway National Unit, Business Gateway Managers, HIE, and SE was formed to oversee the implementation of the project. The Group was chaired by SE and also had representation from the SE Project Manager at meetings

Delivery was organised by geographic area:

- HIE had a contract in place with PA Consulting for 1-1 support to businesses and were able to use this for Digital Engagement support, workshops and 1-1 advice, in the Highlands and Islands. This expedited delivery of the Digital support to businesses and removed the need for a separate procurement for either HIE or Business Gateway. It was anticipated that this would provide consistency in the quality and delivery of provision across the whole of the Highlands and Islands region.
- HIE had a contract in place with PA Consulting for 1-1 support to firms and wished to use this for Digital Boost delivery in the Highlands and Islands
- SE placed four Lots, chosen by geographic area, for the delivery of 1-1 support in Lowland Scotland
- A fifth Lowland Scotland Lot covered the delivery of workshops.

Promotion was undertaken using traditional Business Gateway communication channels:

- Local promotion (newsletter, newspapers etc.)
- On-line
- National media – TV, Radio and Newspapers.

Workshop content was built around 10 topic themes with the model being tested through a pilot using a subset of the topic themes. Our consultations indicate that the Partners struggled to get consistent numbers to attend, and that there were differences in participation by geography, particularly in areas of Lowland Scotland. A cancellation policy was introduced to the tender briefs to providers whereby SE could give providers three days' notice of cancellation if projected numbers were insufficient.

3.4.2 Scottish Enterprise's appraisal role

As set out in para. 2.3 earlier, SE was given responsibility for appraising all of the DSBEP expenditure and Digital Boost was the highest profile (and most widely applicable) of the DSBEP interventions.

Most pre-existing Scottish Enterprise business support offerings were designed for Account Managed firms and were delivered in comparatively small volumes when compared to those that would be on offer to Business Gateway's target clients. Scottish Enterprise was required to break new ground for Digital Boost given the larger numbers of firms that would be engaged.

Scottish Enterprise consultees recognise that it took time for them to understand fully how the design of a large volume initiative could be optimised. Our Business Gateway consultee welcomed being engaged in the process, recognised that considerable progress has been made in all Partners' understanding of the others' contributions and noted that there was scope to continue building on these foundations to deliver genuine "co-production" of new initiatives in the future. "Co-production" was considered to be a necessary approach for Business Gateway for Partnership development going forward.

We set out in para 2.3 the differences in view amongst the partners on the suitability of the appraisal process while also explaining the requirement placed on SE to follow HM Treasury Green Book Appraisal guidance, OJEU procurement rules and its own

Staged Gate Project Appraisal process. All of these influenced the design, approval and implementation of the Digital Boost Programme.

We would note that HIE was already co-producing digital engagements with Business Gateway and that its associated experience contributed to the final Digital Boost design.

3.4.3 Programme evolution

While work on Digital Boost started first amongst the suite of five Projects, it appears to have taken the longest to launch as the Digital Boost approval process took much longer to implement than anticipated. There were several reasons cited for this:

- The Project was the first on which the Partnership as a whole were engaged and it took time for Partners' aims to become aligned
- As it was the first project, the Partnership and SE were required to develop and agree appropriate appraisal and governance processes in parallel
- The Programme aimed to support the core Business Gateway "potential to grow" client group – Business Gateway contracts are tendered by each Local Authority in Scotland and it took longer than anticipated to acquire company contact information for the firms that might be approached
- The scale of the Programme required that it be tendered as an EU OJEU tender (we understand that two tenders were required)
- Individual Business Gateway organisations wished to ensure that local contractors were included in the tender process and their inclusion elongated the tendering timeframe for the five Lots covering Lowland Scotland
- HIE had commenced promoting Digital support services to their client firms and wished to utilize elements of this design into Digital Boost.

3.4.4 The Programme Office

A Programme Office was created, led by COSLA on behalf of the Local Authorities, to assist with Digital Boost's development, launch and implementation. Consultation feedback suggests that the creation and operation of the Programme Office was contractually complicated. We understand that Business Gateway initially expressed a desire to appoint the team directly but found that they could not recruit due to

headcount limitations. An interim measure was identified whereby Scottish Borders Council would recruit the team using funding provided by Scottish Enterprise. However, this introduced VAT issues. A secondment agreement was drawn up between Scottish Borders Council and COSLA. While this provided a work-around, the approach was contractually complicated, time-consuming to deliver and led to a design that was inherently inflexible. By way of learning, consultees suggested that such work-arounds should be "designed out" of future delivery models.

HIE supported the employment of two staff members to manage and deliver Digital Engagement activities.

3.4.5 Procurement

The procurement process in Lowland Scotland was viewed by many of the consultees as being unduly complex. There was a strongly stated initial desire from individual Business Gateway areas for locally based providers to be included in the process. This introduced a degree of complexity to the procurement process and elongated the procurement timescales notably. Four firms were selected to deliver the service. We understand that the highest scoring contractor is given first refusal on new cases and that this has resulted in capacity issues as key staff are based in the North of England. This has resulted in some negative feedback from clients to Business Gateway.

Separately, it was noted that the lowest priced contractor gets to respond first and that it appeared to be responding to virtually all opportunities that arose – it was suggested that this led to capacity constraints. Given that this contractor was based in the North of England, travel time was also an issue. The consultee noted that the contractor suggested to firms that Skype could be used, but given that many of the Business Gateway client group were unsophisticated, the early suggestion to use Skype was not always appropriate for the client.

There was a different delivery mechanism in the Highlands and Islands where HIE has a contract with PA Consulting for the delivery of business support services.

3.4.6 Achievement of KPIs

The SE consultees noted that while they had responsibility for meeting the Activity and Output targets for the Programme, they did not have the same level of control over their delivery when compared to core SE activity (delivered to Account Managed and Growth Pipeline firms).

Overall, all consultees suggested that Digital Boost was the start of a journey. The DEMI findings indicate that there is a significant amount of work to do, that this is a long process and that it may take 3 years from now.

3.5 Survey findings

3.5.1 Sample selection

When undertaking our review survey, there was a significant challenge encountered in obtaining a coherent population of assisted firms and ensuring that firms that had received support from more than one project were identified. This issue is addressed separately in our General Observations chapter (Chapter 9). We would also note that the contact information did not include telephone numbers and was frequently out of date. We sourced telephone numbers from company websites where available but this was impossible in cases where there was no website and the contact's email was generic (Gmail, Yahoo or Hotmail).

The sample selection prioritised firms that had received 1-1 support as these were deemed the most likely group to see a tangible change in their performance – workshops tend to be best for generating interest and stimulating awareness.

A total of 27 firms were interviewed by telephone comprising:

- 14 firms that had received 1-1 support in Lowland Scotland
- 12 firms that had received 1-1 support in the Highlands and Islands
- 1 firm that had only participated in a workshop.

Two firms could not provide detailed responses as one explained that the technical input had still to be provided while a second felt they had not received any 1-1 support

although thought that this may have been an on-site training day at their firm. Thus, the effective population for the purposes of analysing feedback is 25.

While only one of the target firms had participated in a workshop, six of those who were "1-1" targets had also attended workshops so could provide feedback on their value.

Interviews typically took 20-30 minutes. The interviews' duration had an effect on the types of firms that chose to participate. Micro businesses in the service sector with 1-2 employees were either very difficult to contact or chose not to participate when the interview structure was explained to them. Of those who were interviewed, all but two participated in a constructive manner.

3.5.2 Awareness

All but two of the firms suggested that they had first heard of the programme through their Business Gateway contact – of the exceptions, one could not recall while the other noted "word of mouth" from a colleague. This communication from Business Gateway could comprise a conversation with their advisor as part of a more general discussion or at the end of a seminar. One firm noted email correspondence from Business Gateway as the source.

We understand that there has been a significant investment in communicating the existence of Digital Boost by SE/Business Gateway, and that feedback on the effectiveness of these activities suggests that they are having an impact. Our findings could reflect a decision by firms to seek out information on Digital Boost having learned of its existence in the media. That said, interviewees tended to be clear about how they first heard of Digital Boost and this was usually through a conversation with a Business Gateway representative.

3.5.3 Healthcheck

A total 15 firms recalled completing the Healthcheck, with three being certain that they had not completed it and eight being unable to recall.

For those who had completed the Healthcheck, their motives were:

- Completed because it was a requirement for 1-1 support (9)

- Business Gateway Advisor completed for the firm (1)
- Other (4)

We had assumed that all interviewees would have completed the Healthcheck (as it was mandatory) so asked whether their engagement with Business Gateway had been initiated by the need to address an underlying business challenge. Ten firms indicated that this was the case with 70% of these noting that the challenge had been an issue for 12 months or more.

One firm noted that the Healthcheck was very valuable as "it showed us just how bad we are!".

The Healthcheck's output was viewed as being "not actionable" with most firms noting their principal action was to engage 1-1 support through Digital Boost.

The additionality of the Healthcheck is understandably high – 65% of firms would have done nothing (fully additional) if they had not been told to complete it.

3.5.4 On-line Guides

Given that the output of the Healthcheck usually comprises a list of on-line guides that are selected based on the firm's digital profile, we asked firms which of the guides they recalled reading.

Only one firm from the 25 recalled reading an on-line guide but this firm could not recall the topic or its contents. Twelve firms were adamant that they were not aware of the guides' existence and a further 12 firms could not recall or were not sure.

Overall, there is very low awareness or recognition of the Guides.

3.5.5 Workshops

When choosing workshops for our survey, we included topics delivered and participant attendances in the three months over the summer of 2016. We aimed to obtain five interviewees from this group. A total of six firms had attended workshops, with all but one of these participating before summer 2016.

We asked firms to rate the value of the workshops to their businesses. It will be evident from the data in Table 3.1 below that workshops provided firms with new insights and enabled them to see where to act.

Table 3.1 Workshop Influence **Influence of Workshop**	**Average Score (max 10)**
Did the Workshop provide you with new knowledge or insights?	8.86
Did the Workshop provide you with new skills?	3.14
Did the Workshop enable you to see where you needed to take action?	7.71
Did the Workshop lead to you taking an action?	7.71

Eight firms noted that they had taken an action to date as a result of the workshop attendance. As with actions associated with Healthchecks, the principal action deriving from the workshops was typically to engage Digital Boost 1-1 support (4 firms). The remaining respondents suggested that they had focused on social media activity and initiating "analytics" for their websites and social media presences (2 firms) with the remaining firms citing more general actions.

The additionality of Digital Boost workshops is very high with 88% of attendees suggesting that they would have done nothing in the absence of an issue being brought to their attention through attending a workshop.

Quality and content of workshops

The contextual feedback from firms on the quality, content and value of workshops was very positive. With one exception (cited below), firms derived real value from their attendance and left the sessions with an enhanced understanding of the topics and a clear focus of areas where they could take action. There was consistently positive feedback on the quality of the presenters and their ability to engage the audience and make the content real for them. Presenters used specific case examples for members of the audience where their sites were reviewed in real time

and suggestions made for how they could be improved. This approach was very well received by the respondents as it showed that the presenters had prepared well and the examples were presented in a constructive way. There was felt to be real value added in these sessions.

3.5.6 1-1 Support

A total of 24 firms recalled receiving 1-1 support (14 Lowland Scotland, 10 Highlands and Islands[6]). For Digital Boost, 1-1 support comprised up to three days' input from an advisor, and this allocated time *included* travel time and report writing.

For Lowland Scotland, Commendium was the firm most frequently cited (13 respondents). For the Highlands and Islands, there was a broader spread of providers – Navertech was the only organisation cited more than once.

A total of 90% of respondents had a challenge they were looking to address through accessing the 1-1 support. A summary of the range of challenges is listed below:

- Clarifying advice on firms' social media presence, search engine optimisation and a digital strategy/roadmap were the overarching areas of request
- Rationalising and alignment of various elements of on-line presence
- Advice on replacement of Access databases that were considered to be no longer fit for purpose (2 firms)
- Identifying how to respond to Facebook's changing algorithms as the reach of their posts fell from 2,000 to circa 80
- To create an app for customers
- How to extract more value from the website and how to set up a robust social media presence and a blog
- To identify how to transfer their web presence built around transitioning pop-up designer accessory stores to a physical presence through utilising video, TV and digital products scanning
- How to extract value from the firm's large LinkedIn group (8,000)
- How to develop a traceability system to track the provenance of their product once it's sold

[6] One of the H&I firms had not yet received 1-1 support

- How to promote the company through different media channels
- How to enhance the firm's e-commerce presence
- Access to reliable broadband for a firm in a broadband not-spot.

Half of the respondents (12) were aware that they had an issue for over twelve months while, for a further 42% (10 firms), the issue had been present between six and twelve months. The remaining two firms had relatively short term challenges (3-6 months). This indicates that the firms are aware of relatively long standing challenges at start of their 1-1 support.

The processes followed by advisors in the Highlands and Islands and in Lowland Scotland were different and appear to reflect the different delivery models used in each area.

Lowland Scotland

Based on respondents' feedback, the delivery process adopted by Commendium tended to be consistent:

- The advisor would meet the firm and discuss their business and digital presence with key staff. They would discuss firms' areas of need at this stage and frequently asked the firm for a wish-list encompassing what they would like to have addressed. The wish-list would form the basis of a specification for the work that would be done by Commendium and would also indicate the outputs that would be produced and the timescale.
- The advisor would undertake work on behalf of the firm, usually offsite. The firm would receive regular emails and reference material addressing specific topics in the project specification. Where specialised inputs were required, other Commendium staff were engaged and made available to the firm to provide specialist input.
- Commendium would prepare an action plan for the firm that was typically discussed in person
- Commendium would follow-up with firms to assess their progress with actions and discuss any areas where further assistance might be required (within the 3-day limit)
- All of the firms assisted by Commendium could recall that an action plan had been prepared, the types of actions put forward and the proportion they had

addressed by the date of our interview (in addition to those that would be taken in future).

Satisfaction with Commendium was high, even in those instances where the advisor agreed at the inception meeting that some of the firms' wish lists were outwith the scope of the Digital Boost remit. The only area where firms were critical related to the inclusion of travel time in the three-day window – a small number of firms assumed they would get a full three days and were disappointed to find that this was not the case.

All of those interviewed in Lowland Scotland would recommend the programme to firms such as theirs. The key benefits cited were:

- The value in having 1-1 access to an expert who can quickly assimilate the issues and help you focus on the priorities
- Having high quality professional input gives firms the confidence to invest resources in taking action
- Expert knowledge provided informed leads to digital products that were suited to the firms' needs and their operations and saved considerable time
- Seeing the potential value of social media – up to the Digital Boost input, all they could see was the level of resource required
- Having someone whom you can call on informally downstream (Commendium proactively offered this to several firms with the timescales offered being up to a year)
- Digital expert input that is tailored to their individual needs and that of their firm.

In terms of suggested improvements:

- Help with implementation (7 firms) – this was the commonest suggestion and reflects the significant and consistent resource that is required to be invested in social media if a firm's presence is to be sufficiently robust
- Access to the full three days of input (3 firms) – this relates to the point discussed above around the time available for 1-1 meetings and dedicated work on firms' cases
- Shorten the approval time for applications (one firm felt that circa six weeks was excessive).

Finally, while the Commendium advisors were generally rated highly, several firms noted that the advisor who initially interviewed them became unavailable through long term illness. Alternative staff were sourced, but the situation introduced a delay in the project delivery time. This had no material impact in most cases, but in a couple instances the firms were operating in cyclical sectors and had identified a window in which to undertake the project. This "project window" was lost in these cases.

Highland and Islands

As mentioned above, the effective sample for firms in the Highlands and Islands is 10 as two firms felt they had not received 1-1 support.

In contrast with Lowland Scotland, there was not a similarly consistent approach to delivery of 1-1 support in the Highlands and Islands. This in part reflects the different delivery model used by HIE and possibly, based on our discussion with firms, the broader scope of the projects that presented themselves.

The proportion of travel time was cited by several of the firms as being an issue as was the geographic distance of the consultants from firms – the latter was not limited to Island based clients.

All of the firms' projects in the Highlands and Islands commenced with an in-person meeting. To summarise the approach:

- There was a bespoke approach for each firm and there does not appear to have been a formal specification prepared by the consultant in every case
- The scope of the inputs ranged from advice on broadband though to a systems review for a charitable trust, advice on search engine optimisation and an assessment of the organisation's IT infrastructure
- With two exceptions, firms viewed the advisors' reports as being "relatively high level" and they appear not to have provided the firms with insights or knowledge they felt they could not have gained otherwise.

In three cases, firms felt the project was not worthwhile and they would not recommend the Programme to another firm such as theirs – the reasons for their dissatisfaction is as follows:

- The firm suggested that the advisor failed to deliver the output on time and would not include any recommendations for action

- The firm's interest was in producing an app but this was not supported by the advisor – the firm also noted that there was no follow-up
- The availability of the advisor was limited and when they did attend, they did not add any technical information to what the firm already knew (a broadband issue).

We would observe that the scope of Highlands and Islands' projects was broader than those in Lowland Scotland and that this may have resulted in inappropriate expectations being raised. That said and based on firms' feedback, the level of detail included in the consultants' reports appeared to be lower than comparable reports in Lowland Scotland.

One Highlands and Islands organisation was notably positive about the consultant's input. The project considered how to track a product's use throughput its life (i.e. provenance). Initial work had been completed by a summer student in 2015 and the Digital Boost consultant was felt to have produced very useful output which the organisation considered must have taken more than the three days that were allocated. The organisation's CEO was a former HIE employee who understood the project evaluation process. Given their professional background, they may have been more demanding of the consultant and been better at briefing them of their requirements – this may have resulted in a more positive outcome for them.

3.5.7 Firms' actions taken to date

Firms identified a range of actions they had taken. These are summarised below.
Lowland Scotland firms:

- Actioned most of the recommendations principally around keyword searches and optimisation – this has resulted in a slight improvement in web rankings
- Added Meta Descriptions and key words to website content and has started to look at website analytics
- Purchased *Hootsuite* and has formalised the firm's approach to investing in dedicated digital resources.
- Developed a set of mood boards and met with Planys Mobile. The firm is in process of developing new news website for their LinkedIn user groups which is vital next phase for their growth. They have adopted a new "Infusion" CRM System

- Have gained control of their website from a third-party marketing company so can now manage content directly. They have set up Twitter and Instagram accounts and are using them
- Have implemented some actions (didn't provide detail) and have some to do
- Analysed the SEO review recommendations
- Explored in-depth Facebook advertising – Commendium came up with other actions for the future (the volume driven work). Commendium also pointed them to website design software
- Has taken several actions but can't recall.
- Now has more targeted posting on LinkedIn as they now have more knowledge of who will see them
- Things done on the day by/with Steve
- Increase use of social media(Twitter)
- Noted that they had taken actions but other could not recall or would not specify (2 firms)
- Has taken no action to date (1 firm)

Highlands and Islands firms:

- purchased satellite equipment from one of the providers identified by the Advisors
- Disposed of obsolete equipment identified in the Advisor's audit that was no longer functional
- Addressed an issue with Sage accounting that has proven very valuable for them
- Now uses pictures to make more interesting for followers – they also looked at actions to gain more followers
- Had taken action but this was not influenced by content or advice received through the Digital Boost Programme – the actions were informed by research undertaken independently and subsequently on the topic by the firm
- Has taken no action to date (4 firms).

3.6 Summary Conclusions

The aim of the Digital Boost Programme was to move firms along the "digital continuum" and the evidence from our survey suggests that it is clearly achieving this aim, notably in Lowland Scotland. Additionality is high to very high.

Workshops were of high quality and went beyond simply raising firms' awareness of the power of digital technologies – firms gained insights and knowledge that led to them taking actions – the principal one being to request 1-1 support.

Commendium's consulting approach in Lowland Scotland, as described by firms, appears to have been effective in helping firms to focus on priority areas and to identify the actions they needed to take. It also appears to have resulted in firms committing resources to take action and the feedback suggests that this may partly have been due to Commendium staff following up and encouraging firms to do so. The approach in the Highlands and Islands appears to deliver bespoke support to firms and was not as focused on website enhancement, SEO or managing social media. The intensity of action-taking was lower here.

In terms of recommendations from firms, two key areas emerged. First, the ability to gain help and funding for implementation – some micro business owners have very limited capacity to implement the changes required to establish a strong social media presence and as such suggested that extra resource to help them do so would be very valuable. Second, several firms were disappointed that the "three day" allocation included travel time and report writing. They wanted more time with the advisor.

4 Digital Voucher

4.1 Rationale

Scottish Enterprise approval was sought in December 2014 for expenditure of up to £1,100,000 towards the Scottish Digital Voucher Scheme. This followed previous funding approved for a pilot of the scheme of £220,000 that brought the cumulative approval to £1,320,000 at that point in time. This project would be delivered in both HIE and SE regions.

Digital Vouchers were identified at the appraisal stage as one of the activities to be considered by DSBEP as they offered a mechanism to reach a wider range of companies quickly and with minimum administrative costs[7]. When allocating its digital financial support, the Scottish Government recognised that in terms of the growth opportunity, Scotland could increase its GVA by up to £3.7 billion over the next 5-7 years[8] if action was taken to stimulate the digital economy.

4.2 Aims

The voucher provided up to 75% of eligible costs to a maximum of £5,000 and allowed firms to access consultancy and/or support implementation activities. Firms were asked to articulate what they were planning to do and how it would improve their business i.e. access new markets, trade internationally or reduce business costs. This approach recognised the wide range of new and emerging digital services. The SE funding approval linked the voucher to business outputs. State Aid issues and EU restrictions were to be published as part of the application process and acted as the Programme's exclusions. This voucher was targeted at Business Gateway companies in the HIE and SE regions as SE account managed and BG Growth pipeline firms were already supported through the intervention framework for ICT support. In HIE, *HiDigital* was providing advisory services and a *Digital Healthcheck* to all companies. Therefore, the voucher project focused on Business Gateway companies in the Growth Advisory Service, High Value Start Up (including Potential High Value Start Up) categories in the SE and HIE regions, on referral from their Business Gateway adviser. In addition, companies in Business Gateway local growth programmes could

[7] Supporting the Transition to a World Leading Digital Economy- Emerging Findings April 2013
[8] "Technology Insights 2012", e-skills UK, 2012.

also have been eligible for referral. These categories of firms were to be targeted as they had no access to grant support mechanisms but were engaged with Business Gateway. The voucher provided a small one-off financial support to companies as part of the wider support provided by Business Gateway and filled a gap in provision.

4.3 Observations on delivery

4.3.1 Targeting

The programme was targeted at:

- firms eligible for the *Growth Advisory* service, that is firms that have a projected turnover of £200K within three years (Lowland Scotland) and £100K (Highland Scotland).
- Actual or potential *high value new start businesses* defined as turnover at or potentially at £70k in 12 - 18 months of trading.

Firms that were projected to achieve £100K within three years would also be considered where they were already engaged with their Business Gateway office

4.3.2 Eligible projects

The application of the vouchers had to add significant value to the recipients' businesses - they could not simply be used to create a firm's first website. Firms had to show that they were introducing distinctive functionality to their web presence, especially in terms of online trading/e-commerce or internationalisation. The Scottish Enterprise approvals process required the programme to differentiate between different types of project and had associated Smart Objectives, namely:

- Assist in the region of 250 companies to increase usage of Ecommerce, ICT and Digital services to support business growth and internationalisation by 31 March 2016 with these being further broken down as follows
  - 200 companies to **adopt** ecommerce and digital services for business and international growth.
  - 27 companies to **implement** ICT systems for business improvement efficiencies.
  - 23 companies to **develop** new digital services resulting in increased sales and reduced costs.

- Leverage a further £333k of private sector investment in Ecommerce, ICT and Digital Services
- Provide a funding framework that provides the next stage for companies involved in Digital Scotland's awareness and capacity building initiatives, moving them towards Digital Maturity.

The Smart Objectives specifically requested that a proportion of *Adoption, Implementation,* and *Digital Services* projects were supported. However, when firms' projects were being appraised for funding, these classifications do not appear to have been explicitly recorded. Thus, when selecting our sample for survey, we endeavoured to complete a retrospective categorisation based on the project descriptions recorded on SE's database. While we accept that this may not have been especially accurate (as it relied upon the business advisors describing the projects accurately in terms of their fit with the Objectives), it provided an indicative distribution of supported cases that suggests the profile has been broadly achieved:

- Adoption - 409
- Implementation - 37
- Digital Services – 26.

The "adopt-implement-develop" categorisations were used to stratify our interview sample.

Eligible costs could cover the following typical activities:

- Engagement of an IT consultant to upgrade the functionality of a firm's website
- Firms developing a Digital Marketing and/or Social Media plan
- Firms introducing internal software systems that improve efficiencies and reduce costs
- App development
- Website development/upgrading for mobile devices.

During the pilot, the most common activity supported by the voucher was the development or enhancement of an e-commerce site and/or social media implementation.

Excluded activities were clearly stated in the Digital Voucher guidelines, namely: Hardware; "Pay per click" activity; In house staff costs; EU restricted sectors; Ongoing

business costs; Brochure websites; Software as a service costs where they are for ongoing business activity.

There were further eligibility conditions namely: the firm must not match the voucher against other public sector funds; all VAT costs incurred had to be fully paid by the company; Companies could only receive one voucher.

Companies from any sector could apply however it had to be clear from the application that they did not have in-house skills in these areas. E.g. ICT companies might be eligible if their expertise was in technology but they had no e-commerce skills and wanted to develop an e-commerce site. Companies previously considered retail, could be considered if the proposed activity led to internationalisation.

4.4 Survey Feedback

4.4.1 Sample selection

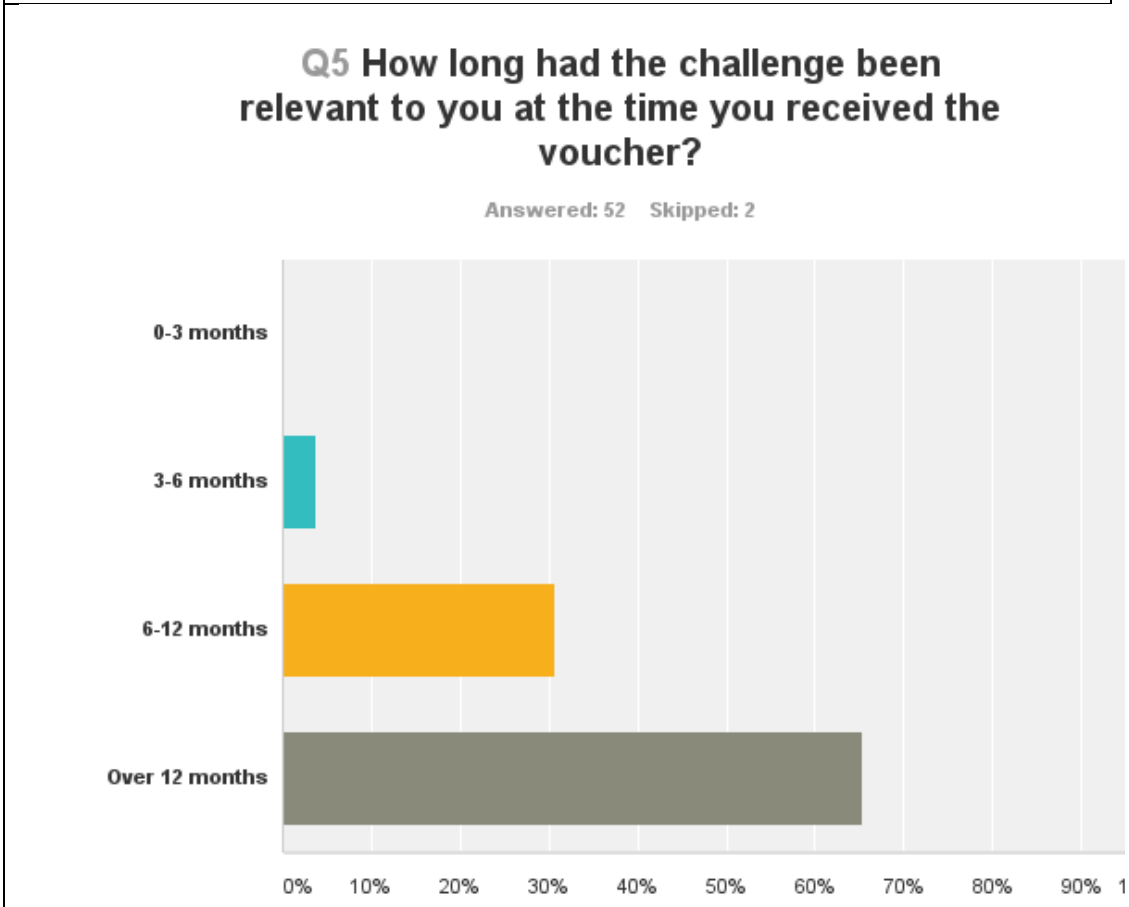
A total of 54 firms who had received support through Digital Vouchers were interviewed by telephone. As with Digital Boost, interviews typically took 20-30 minutes. Overall, firms were keen to participate in the evaluation.

One firm interviewed did not have time to complete the full survey. They stated that they had received a Digital Voucher and that it had been a great benefit to the firm but they were only able to provide limited information. Therefore, in some instances the survey response is for 53 firms.

4.4.2 Specific Business Challenge

All firms interviewed stated that the Digital Voucher was used to help them address a specific business challenge. The amount of time the challenge had been relevant to the firm before receiving the voucher varied (Figure 4.1). In two thirds (66%) of cases, the firms had been facing the business challenge for over a year, 30% had been facing the challenge for 6-12 months and only 4% had experienced the challenge recently. Thus, Digital Vouchers were used to address long standing business challenges.

Figure 4.2 Firms' motivation



Overall, the main digital challenge facing firms was website upgrade or development, this accounted for 37% of cases (20). Website and online shop development, was the second most common challenge highlighted (8 cases). Other challenges faced were:

- Software solutions development (5)
- Website and social media (3)
- Software replacement (3)
- Need for automation (3)
- Website and online business model development (2)
- Website and digital marketing (2)
- Website and stock control (1)
- Data security (1)

- Improvement to search ranking (1)
- Billing system development (1)
- Live analytics (1)
- Digital product development (1).

4.4.3 Voucher value

Fifty-three companies were able to specify the amount of funding they had received. Almost half of those surveyed, 47% (25 firms) had received the maximum £5,000 grant, indicating that overall consultancy or support implementation activity costs for these firms were in excess of £6,666. A further 26% had received a voucher between £4,000 to £4,999 (see table 4.1).

One firm had been involved with the Programme but had not received financial support due to difficulties with the specialist which led to the project not progressing.

Table 4.1 : Voucher value

Voucher value	Number	%
£5,000	25	47
£4,000 to £4,999	14	26
£3,000 to £3,999	5	9
£2,000 to £2,999	4	8
£1,000 to £1,999	5	9
	53	**99***

*figures do not add up to 100 due to rounding

4.4.4 Voucher support activities

The Voucher enabled firms to develop their digital capacity in a range of areas. These included activities to:

- Enhance / rebuild website (74%)
- Introduce or enhance ecommerce / on-line sales (38%)
- Introduce new digital services (36%)
- Introduce or enhance digital business management systems (28%)
- Develop a digital strategy (9%).

(Note: firms could provide multiple responses.)

4.4.5 Third party specialist

Almost all (53) firms engaged a third party specialist as mentioned earlier. In the one case, where a specialist was not engaged, the firm had not proceeded with their Vouchers supported project. In total, 45 different specialists were appointed. Across the survey sample, no specialist was used twice. However, 9 firms were unable to recall who they had appointed, so there may have been an overlap of which we are unaware. A written specification was prepared for the specialist's input by the majority (48) of firms, 14 were written mostly by the firm and 34 written by the specialist. A verbal specification to the specialist was provided by 4 firms.

4.4.6 Specialist activities

The specialists undertook a broad range of digital activities. The type of activities provided are listed below:

- Developed content strategy for updates
- Creative design
- Training for company on how to add to and maintain website
- New website designed and developed
- Provision of a demo model
- New graphics and logo
- Rebranded the business and logo design
- Integration of the companys booking system with online booking system
- Search Engine Optimisation
- Use of social media (Facebook, Google, Twitter and YouTube)
- Enable eCommerce
- Data analytics
- Collect and integrate new data
- On-line marketing
- Link to stock control
- Type setting books
- Linkage to Raspberry Pi(s).

4.4.7 Specialist output

The output received from the specialists varied. Only 13 firms had received formal output, of which 31% said it was in the form of a conversation, 38% received a short (less than 1 page) summary of key points, a report (less than 5 pages) was provided to 23% and a detailed longer report (in excess of 5 pages) was provided to 8%.

Where the output was less formal, specialists had effectively provided services that comprised the essence of their engagement by firms. Examples included:

- Specialist technical training
- Website development
- Training on how to use and update the website
- Cloud based system for whole company developed
- New accounts software
- CRM/supplier management system in Cloud
- Analytics software
- Populated subscription database
- Software design and implementation
- Stock integration systems
- Design of back office system
- Development of digital products eg. Books transformed into eBooks.

4.4.8 Actions Taken to-date

The majority of firms have completed or nearly completed their Voucher supported activities. In addition to the activities summarized in para. 4.4.7 above, actions carried out as a result of the Voucher include:

- Website completed and bedding in
- Accountancy package integrated with website
- Committed to 12 month Search Engine Optimisation
- Establishing data analytics
- Use of 3D modelling
- Installation of new software

- Software development
- System implementation
- Implementation of a digital marketing campaign
- Customer relationship management programme live
- ISO accreditation
- eBook content.
- Social media development.

In three instances firms were midway through implementing their new website.

4.4.9 Actions planned in the next 12 months

Thirty four firms stated that they planned to carry out further actions over the next 12 months as a result of the Voucher support they had received. Across these companies, further website development was highlighted as the main key action area. This included adaption, expansion and marketing of their websites. Firms also recognised the advantages of promoting their website through increased use of social media, YouTube and blogs, so as to increase customer awareness. Other planned actions included:

- Working towards accreditation in health and safety to pitch for Council work
- Adding a digital logbook for clients
- Implementing an in-bound marketing campaign
- Start Google AdWords campaign
- Translation of website into other languages
- Engage YouTube and Sound Cloud in order to expand their offer in distribution services
- Open international office
- Implement additional reporting improvements
- Develop packages with other businesses using Eventbrite on-line.
- Integrate payment systems
- Roll-out app for customer use
- Expand across the UK operation as a result of the newly designed remote management system
- Exporting to EU

- Linking accounts and accessing stock system remotely
- Move towards a 24/7 operation
- Promote the use of applicant tracking system.

It can be seen that there is an active marketing and internationalization focus to these actions.

4.4.10 Added Value to Business

Firms were asked whether the Voucher support had added or will add value to their business. Fifty one out of 54 firms surveyed (94%) stated it had added value to their business. Only two firms stated that the Voucher had not added value. In one instance, specialist support had been obtained for online marketing which unfortunately had been unsuccessful. In another, the project had not progressed and Voucher funding not been obtained. One firm skipped the question due to time constraints on the interview. Across the survey sample, firms identified the following benefits to their businesses as a result of the support.

- Websites**:** The improvement and upgrading of websites has resulted in
  - Reduced work load of staff
  - Reduced in costs
  - Increased in enquiries leading to generation of new business
  - Increased customer awareness
  - Provision of up-to-date information on the company

  (A number of firms noted that their websites now more accurately reflect the quality and function of their business.)
- Marketing**:** Improved and updated marketing leading to
  - More customer enquiries
  - More customer specific marketing undertaken as a result of improved customer information.

- Increased efficiencies - Online bookings have led to reduced administration time and therefore reduced costs to the firms
- Diversification into new sectors leading to increase sales
- Streamlining of activities thereby reducing costs.
- Improved data security
- Improved stock control resulting in 'live' stock information

- Creation of a digital product. This has enabled sales across a much wider geographical area.
- Implementation of systems leading to a reduction in firms time and costs
- Increased presence on social media, due to up-to-date websites
- Increased capacity to take on new customers.

Firms were asked what they would have done had the Voucher support not been available. Fifty two out of the fifty four firms surveyed responded to the question. One quarter (13) would have done nothing and the project would not have progressed. Most firms (44%) would have tried to do something without support, but stated it was likely to have been less effective. Seventeen per cent (9) would have taken longer to take a similar course of action and 13% (7) would have taken a different course of action. None stated that they would have taken the same action within the same timeframe without the Voucher.

4.5 Overall Summary

The approval of the project was contingent on the achievement of a set of Smart Objectives being achieved where these defined the types of projects that would be supported in firms. These do not appear to have been used to categorise Vouchers funded projects when advisors appraised projects or recorded them on their respective Management Information Systems. Our review suggests that the supported activity has been broadly in line with the desired profile.

The appraisal stage of the project has been relatively straightforward.

Vouchers have been very well received and the goal of enhancing firms' website functionality so as to facilitate e-commerce trading and potential exports has been achieved. Additionality has also been good with a quarter of firms' engagements being fully additional, while 44% of firms indicated that while they would have tried to do something, it would not have been very effective.

Overall, delivery and targeting to date appears to be as planned and Digital Vouchers have been very well received by firms.

5 Cyber Resilience Voucher

5.1 Rationale

Where the other DSBEP projects are designed to increase companies' participation in digital activities to help drive economic growth, Cyber Resilience was designed to ensure companies achieve growth in a secure manner. Cyber Resilience is the term used to describe not only making a company cyber secure but also providing them with the ability to respond and recover from a cyber attack and get back to "business as usual" in the most efficient manner possible.

A budget of £466K (inc VAT) was allocated to the project

5.2 Project aims

There were two principal aims:

- To contract with a suitable delivery organisation to develop a Cyber Resilience Toolkit for Business Advisors and deliver this through a series of workshops
- Creating a Cyber Resilience Voucher, offering firms up to £1.5K that would enable them to reach the UK Cyber Essentials minimum level of competence.

5.2.1 Cyber Resilience Toolkit & Workshops

PriceWaterhouseCoopers was awarded a contract to develop a Cyber Resilience Toolkit that could be used to raise awareness and educate, the training focused on company facing staff across the DSBEP. These were designed to enable trained individuals to have informed conversations with many more businesses on the subject of cyber resilience and signpost them to available help.

The first workshop was delivered in July 2016. Up to 140 business advisors have been engaged to date (October 2016) and workshops are open to Business Gateway Advisors, Account Managers and Innovation Advisors in both HIE and SE. Advisers could participate either online or in person. Workshops typically engaged around 15 people (up to 20 in the central belt) although numbers are smaller in more remote areas e.g. Western Isles. If there was insufficient take-up, workshops were cancelled.

5.2.2 Cyber Resilience Voucher

While workshops were the first element of the programme, the second element was the creation of a Cyber Resilience Voucher (launched in May 2016) which would provide firms with up to £1.5K to engage a consultant to review their systems and make recommendations that would increase their basic levels of cyber resilience by achieving the UK recognised Cyber Essentials standard - the UK Government developed this accreditation scheme which is increasingly being used in the procurement practices of larger organisations in England and Wales to recognise the standard of firms' cyber competence. The consultants' input comprised:

- an audit of the firm's current position
- advice on areas for attention
- the development of an action plan for the firm setting out areas for attention in order to achieve the UK standard

While used in large organisations at the time of approval, it was anticipated that its reach would widen considerably over time.

At the time of SE's approval, there were four approved accreditation bodies that had been appointed by the Department for Business Innovation & Skills to deliver the UK programme. In turn, these organisations had an approved panel of suppliers who could support firms with implementation. For efficiency, DSBEP directed firms to these suppliers.

The Voucher is only paid to the firm when they have successfully gained the Cyber Essentials accreditation. This accreditation must be reassessed annually. The target is to deliver 200 vouchers by March 2017[9]. Seventy five had been awarded by the end of September 2016.

At the time of consultation (September 2016) SE was receiving 2-3 applications per week as a result of promotion by business advisors. Initially SE held off direct marketing as they were concerned that it would lead to excessive demand. In order to meet the target deadline, a direct marketing programme is proposed for Autumn 2016.

[9] This Cyber Resilience Voucher project deadline has been extended to the end of June 2017

5.3 Observations on delivery

5.3.1 Experience on UK delivery was utilized

Before embarking on a Scotland-wide initiative, the project manager consulted with UK Department of Business Innovation and Skills (BIS) to capture learning points from the preceding UK experience. This helped shape the design and delivery of the Scotland programme. While BIS had undertaken direct marketing to promote their initiative, we understand that participation by Scotland-based firms was lower than might have been expected.

5.3.2 Channel to Market

Compared to other SE Business support programs, its delivery has been more complex. It has required the SE team to work through the COSLA National Unit who in turn communicate to Business Gateway. There were some initial communications failures but these have been reduced over time and the process was considered to be working reasonably well by Autumn 2016.

5.3.3 It takes firms time to implement necessary changes

Specialist advisors provide advice to firms on what it is they need to do. It is up to the firms to take the necessary action before re-presenting themselves for accreditation. These actions take time to implement with a typical leadtime being around three months.

This lead time may be an issue given the progress to be made against target for the remainder of the programme. However, given the achievement of 75 claimed vouchers following launch and delivery over summer 2016, completing the remaining 125 looks achievable (if a little tight). The proposed extension of the project funding term to the end of June 2017 should help considerably.

5.3.4 Cyber Security links to other Programmes

Cyber Security has links to other initiatives, for example the Digital Tourism. Business Gateway and Visit Scotland staff participated in the PWC workshops.

5.3.5 Approvals process was time-consuming

As covered in Chapter 3 (Digital Boost) it was recognised that all project approval processes are time consuming however delays relating to the voucher scheme principally resulted from some initial challenges in securing internal resource to deliver the scheme. In addition, delays in the toolkit resulted from a combination of stakeholders taking longer than anticipated to respond to requests for input and challenges securing a host location for the final toolkit.

5.4 Survey findings

5.4.1 Sample selection

Twenty-one firms that were interviewed as part of the evaluation had received Cyber Resilience support. The interviews tended to last around 20 minutes and as with Digital Vouchers, most companies were keen to participate in the evaluation. Where companies were unable to engage actively, this was predominantly due to time constraints on their part in the run up to Christmas.

Companies were asked at the outset whether they had received funding for Cyber Resilience support. Twenty firms could provide details of the funding they received while the remaining interviewee did not know the value of the voucher.

5.4.2 Specific Business Challenge

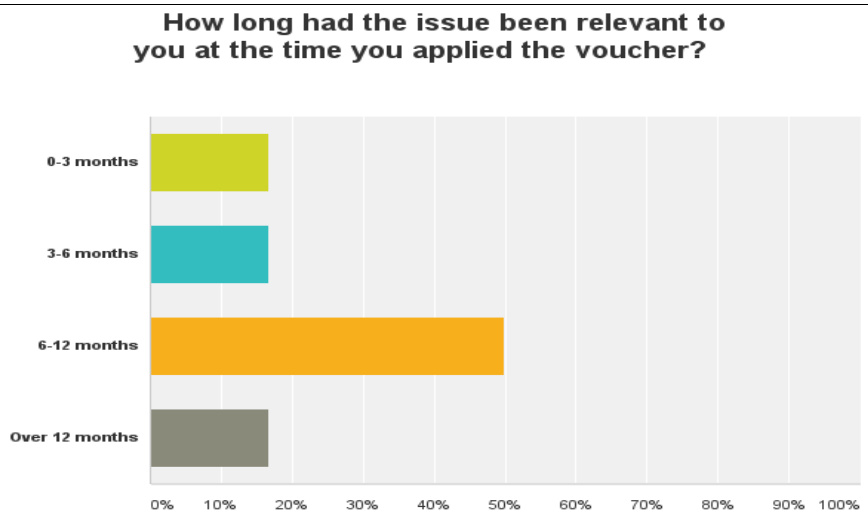
Thirty per cent (6) of firms were using the support to address a specific security issue. These included:

- Two firms who recognised that their company systems were not secure - they held client confidential information on a web-based record keeping system and needed to ensure it could not be hacked.
- One firm who needed to ensure that they were meeting current regulations and reducing risks to clients' data - they used the Cyber Essentials accreditation to provide reassurance to clients and as a sales tool.
- One firm who dealt with company sensitive information for the aerospace industry and needed to ensure that their systems were secure.
- One firm's whose target market (Nuclear Decommissioning project) required them to be cyber security accredited

- One firm, involved in Defence, who was being declined work as they did not they Cyber Essentials accreditation.

Prior to applying for the voucher, all but one firms (5) answering this question had been facing a specific cyber issue for less than a year. Only one firm stated that the issue had been relevant to their firm for over a year. This is notably different to other DSBEP projects where most firms had used the support known and long-standing issues (such as SEO). The finding emphasizes the recent and rapid emergence of cyber issues.

Table 5.1 Timeframe for Cyber issues



Seventy per cent (14) stated that accessing the cyber resilience support was not in response to a specific threat but rather an awareness of the need for up-to-date digital security. Thus, this was pre-emptive, defensive action by firms.

5.4.3 Voucher value

Fifty seven per cent (12) of firms interviewed received the full amount available under the programme (£1,500). Twenty per cent (4) received between £1,250 and £1,499 and 20% (4) between £1,000 to £1,249. One firm stated that they had not received a Voucher.

5.4.4 Voucher support activities

Firms were asked what the Cyber Resilience Voucher had enabled them to do. All 20 firms surveyed, who had received funding, engaged a specialist and achieved the Cyber Essentials Accreditation. In addition, 45% (9) noted explicitly that they had also developed a cyber security strategy.

In 20% (4) cases, firms noted that the cyber specialist had carried out additional activities, specific to their firm. These included:

- Evaluating, checking and assessing the vulnerability of existing systems (2)
- Ensuring compliance with client requirements (1)
- Auditing of existing processes (1).

5.4.5 Specialists

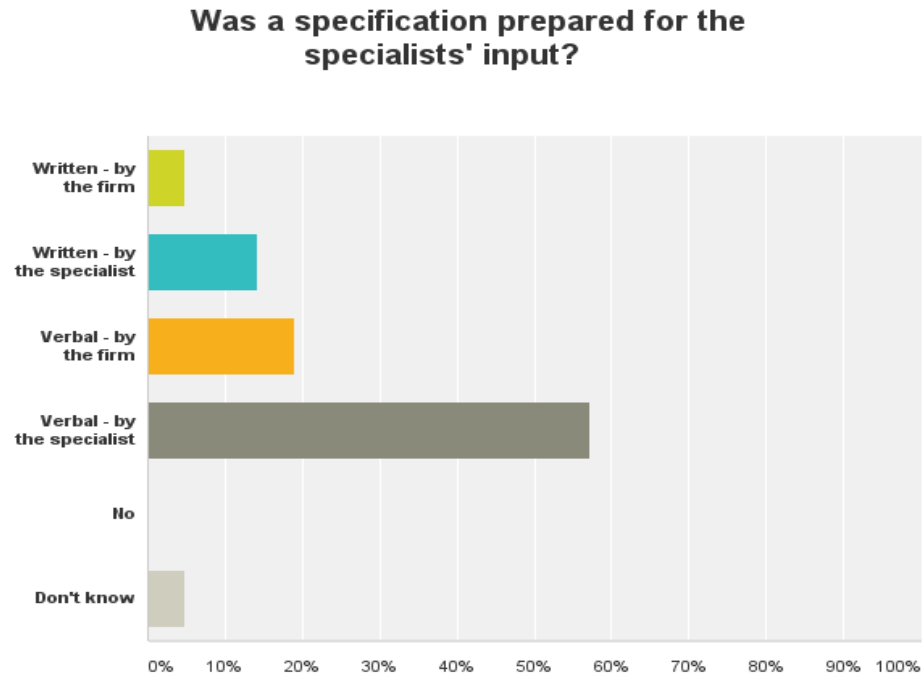
The specialists engaged across the survey sample were:

- Cyber Solutions (6)
- Seric Systems (4)
- Unleashed IT (3)
- Pisys (2)
- Truststream (2)
- Douglas (2) (unknown surname)
- Egress (1).

Firms were asked whether a specification was prepared for the specialist's input and if so what format did this take (see chart below). For over half of firms (57%) the specification consisted of a verbal discussion led by the specialist and in 19% (4) instances it was a verbal discussion led by the firms.

The specification consisted of a written document in 19% (4) of cases, 14% (3) written mostly by the specialist and 5% (1) written mostly by the firm. One firm was unable to recall whether a specification had been agreed with the specialist (see chart below).

Table 5.2 The development of a project specification



Given the nature of the assessment, a verbal specification would seem appropriate. Cyber Resilience Vouchers are unlike other DSBEP interventions where a consultant is engaged to assist the firm address an operational challenge. With Cyber Resilience, the consultant's role is to assess the firm's level of compliance with the UK standard and identify gaps in its systems. Thus, at the *specification* stage, a verbal assessment is acceptable.

5.4.6 Specialist output / what was received

Firms were asked what "output", if any, the specialist had produced. Of the 21 firms in the survey sample, 17 had received a written 'output' and two had received verbal feedback.

The form of output varied across the sample. In over half (53%) of cases the firm had received a written report in excess of 5 pages, 16% had received a short report (<5 pages) and 21% receiving a short written summary (<1 page) identifying the key actions required to achieve accreditation.

For the two firms who had not received written output or verbal feedback, the project was still in progress for one firm and in the other, the firm had not received funding and therefore had not progressed with the project. Given that firms have to follow an action plan to gain the accreditation, we consider that a written output is best as it provides a point of reference to which firms can return when implementing changes.

5.4.7 Specialist activities

The activity undertaken by the specialist varied by firm and depended on the firm's digital requirements. Generally this involved an assessment of the firms' digital technology procedures, equipment, password protection and software. Recommendations were then provided by the specialist on how to improve security. In two instances, the specialist delivered a company wide seminar for 1.5 hours on cyber security.

5.4.8 Actions Taken to-date

Firms were asked what actions they had undertaken, if any, to achieve the Cyber Essentials Accreditation. Seventy one per cent of companies (15) surveyed stated that actions were required by them to achieve the Accreditation. Across the survey population, these included:

- The need to perform software updates to equipment such as network switches and printers.
- Changes to desktop settings.
- Automatic Windows updates.
- Establishing security policies and communicating them across the company
- Tightening up website and not holding data
- Change Administration passwords on a regular basis
- Develop policies and administrative rights
- Disable autoplay for USBs and CDs
- Carry out regular scheduled anti-virus scanning
- Install malware and security systems/software
- Change security settings in staff computers
- Develop company policy and plan towards cyber security

Fourteen per cent (3) firms were unable to remember the actions they had taken and 10% (2) firms said no action was required by them. One firm in particular described the Accreditation process as a "tick-box" exercise and stated no changes were required.

5.4.9 Actions planned in the next 12 months

Seventy-six per cent of firms (16) stated that no further action was required on their part and that they had met the Accreditation requirements. In two cases, the projects are mid completion and Accreditation is yet to be obtained.

Further action was planned by two firms. One firm stated that this included activities to set up a consortium with other companies to provide cyber security advice to other companies. For another firm, the recommendations provided by the specialist have made it easier to secure funding from their Management Board.

5.4.10 Voucher support

Firms were asked what they would have done without Cyber Resilience Voucher support. The survey found that:

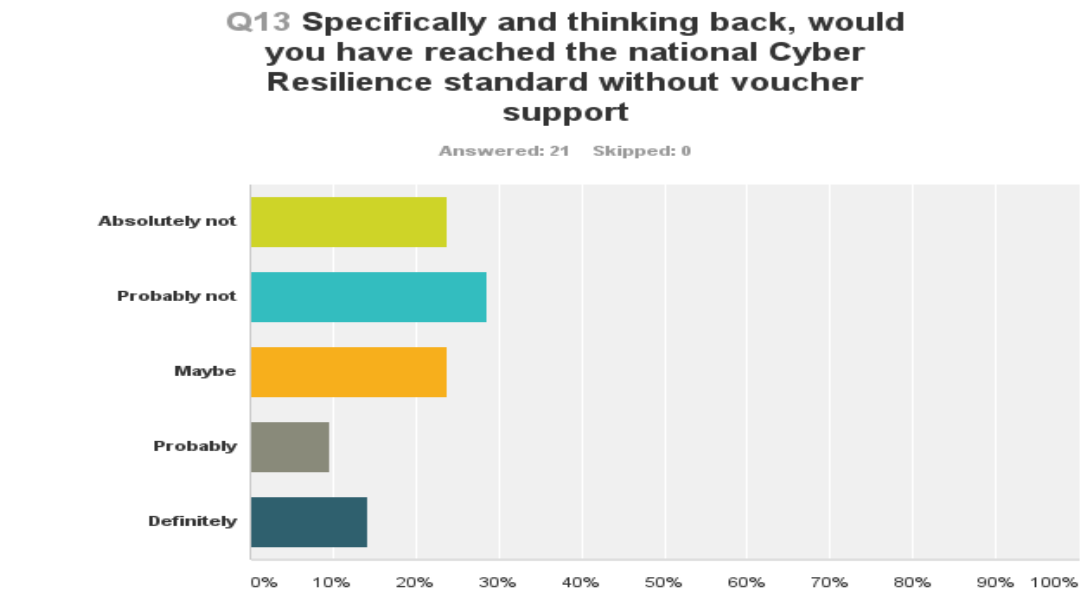
- 48% (10) firms would have done nothing
- 24% (5) would have taken longer to take a similar course of action
- 14% (3) would have tried to do something but it would have been less effective
- 10% (2) would have taken a different course of action, and
- 5% (1) would have taken the same action within the same timeframe.

The firm stating that they would have taken the same action within the same timeframe stated that the specialist provided a second opinion and although this was valuable, they were already meeting the requirements for Accreditation.

5.4.11 Attainment of Cyber Resilience Standard

Firms were also asked whether they would have reached the Cyber Resilience Standard without the Voucher support (see chart below).

Figure 5.3 – Alternatives to Cyber Resilience Voucher



The Standard would not have been reached in 24% of firms (5). Fourteen per cent (3) firms stated that it would definitely have been obtained without support. In these instances, the firms felt they were already meeting the Cyber Resilience standard.

5.4.12 Impact on Customers

Seventy six per cent (16) felt that obtaining the accreditation would have an impact on their customers, either by retaining existing, attracting new customers or both (see Table 5.1 below).

Table 5.1 : Cyber Resilience Standard Impact on Customers

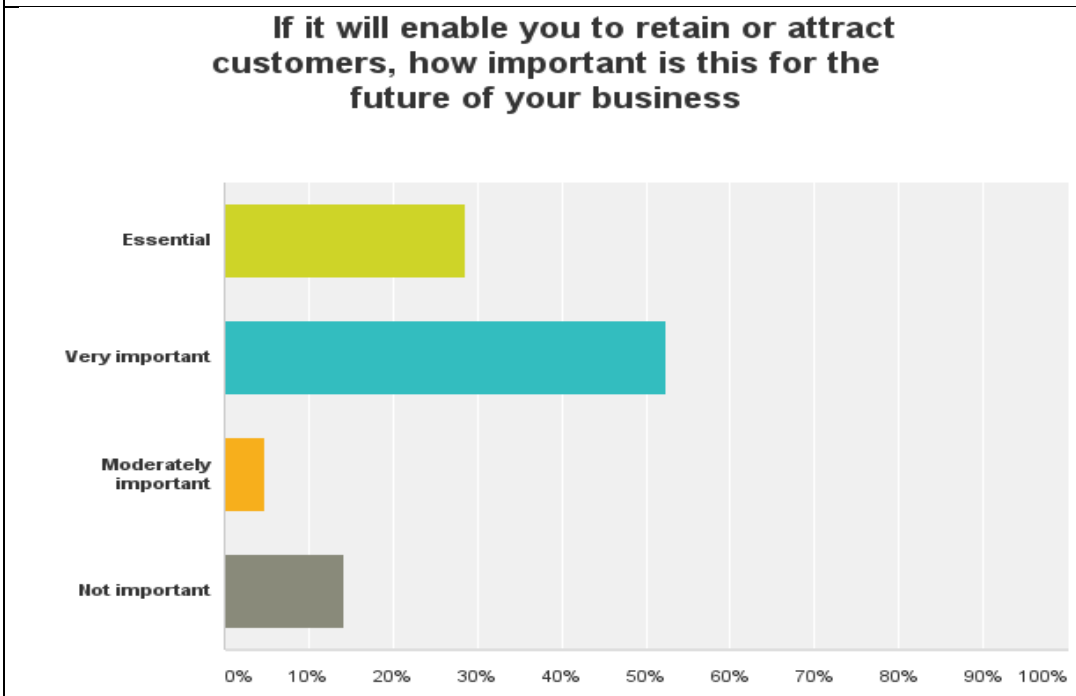
	%	Number
Retain existing customers	24%	5
Attract new customers	19%	4
Both retain and attract customers	33%	7
No influence on customers	24%	5
Total		**21**

Approximately a quarter of the survey sample, however felt that gaining the accreditation would have no influence on customers.

5.4.13 How important for future of your business

Eighty five per cent (18) of those surveyed stated that obtaining the Cyber Resilience Standard would be important for their future business, with over a quarter describing it as "essential". In particular, one firm stated that they are now able to tender for contracts that they could not do before. Only 15% (3) surveyed did not think the accreditation was important to the future of their business.

Table 5.3 – Value of Cyber Resilience Vouchers to Retaining/Attracting Customers



5.5 Summary Conclusions

The project approvals process was relatively straightforward although the project did incur delays to the overall delivery lead-time due to internal resource and hosting challenges.

Initial demand was good given its early, passive promotion. The proposal to promote the Cyber Resilience Vouchers actively should greatly increased demand. If demand remains weaker than expected, it may be appropriate to use organisations such as the Federation of Small Business to promote the Vouchers to their members as it is one of their priorities.

It is notable that cyber issues were identified by firms as being a relatively recent challenge, unlike other DSBEP initiatives.

None of those in receipt of the voucher claimed to have been subject to a cyber attack prior to their participation. Rather they were pursuing the accreditation as a defensive measure or to meet customers' procurement standards.

6 Digital Tourism

6.1 Rationale

Approval for expenditure of up to £1,043,514 (incl. VAT) was granted for the Digital Tourism Programme where £561,757 came from SE, and £656,757 came from the Digital Scotland Business Excellence Partnership (DSBEP). The Programme officially launched in November 2015 and is due to complete in June 2018 – typically a year to 15 months later than other DSBEP measures.

The rationale for the Programme was that Tourism businesses can, with the effective exploitation of digital technologies, influence each stage of the visitor journey and ensure exceptional experiences are provided and shared at every opportunity. The Approval paper proposed that digital technologies can enable businesses amongst other things to:

- Understand and engage better with potential visitors via websites and social media
- Promote more effectively destinations and their business internationally
- Develop new visitor experiences using digital technologies
- Increasing visitors numbers by engaging on social media activity
- Operate more efficiently
- Capitalise on large international digital marketing campaigns e.g. VisitScotland's campaigns
- Increase word of mouth by encouraging visitors to share their experience via social media.

However, as evidenced by the DEMI analyses, many firms are relatively unsophisticated when it comes to the application of digital technologies.

6.2 Aims

Despite the opportunities that digital can bring to individual businesses and the sector as a whole, it was felt that tourism businesses were not maximising these. New improvements in digital infrastructure, for example the roll out of next generation broadband in the Highlands and Islands meant that more tourism businesses could

have the opportunity to benefit from the digital connectivity and that more structured, sector specific digital support was required to ensure the tourism businesses achieve their growth ambitions.

The Digital Tourism Scotland (DTS) programme proposed to address known sectoral weaknesses by:

- Adding breadth and depth to available digital support
- Connecting companies to available digital support whatever their level of digital sophistication via a digital tourism support portal
- Delivering digital support to the sector in a joined-up way where industry and public sector work together to deliver a digital support plan
- Empowering companies to use and support national/destinations' digital marketing activities.

By addressing these challenges, it was anticipated that the (DTS) programme would:

- Drive growth, profitability and quality in tourism across Scotland through improving businesses' skills, capabilities and confidence to invest in digital technologies
- Inspire and support tourism businesses to lead the way on digital innovation and compete globally with other tourism destinations
- Enable tourism businesses to innovate and develop exceptional experiences that will encourage visitors to stay longer and spend more
- Enable tourism businesses to exploit and benefit from digital marketing opportunities which will enable them to reach markets globally.

The (DTS) Programme aimed to adopt a Team Scotland approach (led by Scottish Enterprise) through the creation and engagement of the Digital Tourism Scotland Working Group (DTSWG). The Approvals Paper set out in some detail what the Team Scotland approach would comprise along with a proposed structured learning journey for firms that would facilitate access to digital support for businesses according to their level of digital competency.

It was planned that additional support could include:

- Project implementation support surgeries and funding workshops
- Best Practice Learning journeys

- Business briefings & Conferences
- Online content e.g. “Listening to our Visitors”
- Digital Ambassadors programme.

A pilot was approved by DSBEP to trial elements of the new support proposed for the SE and HIE areas. The pilot funding was used to scope and deliver work with Digital Ambassadors; intensive support to tourism groups and key individuals within the sector, in key destinations; and group development around collaborative opportunities.

6.3 Observations on delivery

The working group took a decision to deliver mostly between late January and April then from mid-September to early December when tourism businesses are less busy. As with other DSBEP programmes, responsibility for delivery is split geographically with separate approaches being applied to Highlands and Islands and Lowland Scotland

A key focus of the Programme is to enhance the visitor experience, in particular emphasising to Tourism businesses the importance of contributing to all aspects of the visitor journey and in engaging with visitors at each stage. Digital technologies were considered to have particular value in stimulating awareness amongst potential visitors of what Scotland has to offer (i.e. getting Scotland into the consciousness of potential visitors).

Prior to the launch of the Digital Tourism Programme, the Edinburgh Tourism Advisory Group (ETAG) had run a Digital Technology for Tourism Businesses event annually for firms based in the capital. The DTS team took this event as a platform to launch the programme in partnership with ETAG, opening the event to a Scotland-wide audience and working closely with all partners on the development and promotion of the event Management.

The Programme design comprised five principal elements:

- Awareness raising events explaining the Digital Tourism Programme design and covering the evolution and application of digital technologies and their trends

- Workshops (half to full day) covering topics such as Google analytics, optimizing the use of social media platforms (e.g. Facebook, LinkedIn and Instagram) and the development of digital strategies – these are practical sessions
- Surgeries delivered by the current supplier alongside the Workshops. They are based on an ETAG model where firms receive one hour of intensive inputs on the application of digital technologies that includes a quick review of their use of digital technologies and applications - take-up of surgeries has been mixed as we understand that not every region chose to avail of the offer
- Webinars – HIE agreed as a programme partner to develop and deliver webinars that will then form part of the DTS online resources.
- Digital Ambassadors – this element was based upon a pilot implemented in Q1 2015 in Glasgow using firms identified by the Glasgow City Marketing Bureau – the pilot had 15 firms from Lowland Scotland and circa 75 from the Highlands and Islands area - HIE have a programme to develop digital champions/ambassadors within the destination they have contracted with to develop and deliver destination development activities.
- Learning journeys will offer leaders of tourism businesses an opportunity to see exemplars in other parts of the UK and abroad.

Based on our consultation with the Digital Tourism Programme lead, we understand that the principal engagement with firms, up to the point of our review commencing, was through workshops and awareness-raising events. One to one intensive surgeries had not been implemented at scale.

The Scottish Enterprise approval paper identified a specific set of outputs that the Programme was designed to achieve. Those that were relevant to this review are summarized as follows:

- Numbers of businesses making significant investment (>£500) on digital innovation as a result of accessing digital intensive or 1-1 support. This will include digital technology to improve operations or visitor experiences
- Numbers of businesses using social media effectively as a result of attending workshops and webinars.
- Numbers of businesses reporting improvement of business operations as a result of participating in the programme's workshops, webinars, videos
- Numbers of businesses reporting better engagement with international markets (measured by increase in international visitors)

- Numbers of businesses entering new international markets (measured by visitors from new international markets)
- Numbers of businesses taking a strategic approach to integrating digital technologies within the business

We return to these metrics below.

6.4 Survey findings

6.4.1 Population, sample and location

Contact details were available for 79 firms which had attended at least one workshop, 48 of which in the ETAG catchment. Thus, our sample effectively comprises 32% of the population which we feel is robust.

There were 14 DTS interviews and 11 ETAG interviews completed. Interviews typically took 15-25 minutes. Although five firms refused to be interviewed, we found that generally firms were happy to participate. We feel that this implies that not only had firms remembered the workshops but had gained value from them.

6.4.2 Awareness

Over 80% of participants heard about the workshops through email or through their DMO (also by email). The rest heard by word of mouth or through an online search. None of the respondents indicated that they were referred by a Business Gateway/HIE adviser or as a result of a press/media advert.

6.4.3 Online Guides

Seven firms (28%) had used the online materials, mainly for general information/education. They had gained knowledge and insights and saw where they needed to take action. Few actually took action however and actions taken were non-specific (for instance, 'keeping up with digital developments'). Additionality was high, with all reporting they would have done nothing or tried something much less effective in the absence of benefitting from the guides' contents.

6.4.4 Workshops

There were 17 workshops covered by the survey. Six were not attended by any survey participant. About half of the participants had attended more than one workshop, three had attended 3 or 4 workshops and 80% of firms had attended to address a specific technical challenge. The most popular were:

- Digital Strategy (38%)
- Create Compelling Content (21%)
- Driving the Right Traffic (21%)
- Make Sure You've Got Your Social Media Profiles Updated (21%)
- Review And Create A Plan For Your Website (17%)
- Create Compelling Photography Content (13%)
- Google Analytics (13%).

The Digital Strategy workshop was divided into two half days. Several participants commented that they had only attended the first session.

6.4.5 Workshop Influence

From Table 6.1, it can be seen that the workshops were effective in providing new skills as well as knowledge. Firms did go on to take action. The *Review And Create A Plan For Your Website* workshop was particularly effective in this regard presumably because participants had a clearly defined and relatively urgent need to address, having decided to redevelop their website.

Table 6.1 Workshop Influence Influence of Workshop	Average Score (max 10)
Did the Workshop provide you with new knowledge or insights?	7.84
Did the Workshop provide you with new skills?	6.56
Did the Workshop enable you to see where you needed to take action?	7.96
Did the Workshop lead to you taking an action?	7.92

Additionality was high, with 84% of firms saying they would have taken no action or less effective action, had the programme not been available.

6.4.6 Quality and content

Almost all participants found the workshops useful and 95% would recommend them to others. Relevant, practical content and insights were particularly mentioned and also the opportunity to share best practice and ideas with other participants. The workshops were run by knowledgeable presenters who were able to offer specific answers to questions.

6.4.7 Improvements

While the workshops were highly rated, there were comments from the more experienced participants that the very mixed ability of those attending made progress slow. Several suggested that it would be better to have separate beginners and advanced workshops. Separately, it will be seen in Chapter 7 that similar comments were made by a small number of #hellodigital! workshop attendees, where one person suggested introducing a "Traffic Light" coding to guide attendees towards events that were well matched to their level of competence.

While we can see the sense of splitting the Digital Strategy workshop over two half day sessions, the failure by some respondents to attend both sessions suggests that this arrangement does not suit everyone. It may be that if the workshop was split into beginners and advanced then it only need last one half day session for each group. Many of the participants advertised on Social Media and we suggest it might be worth offering a workshop on online advertising to cover Google Adwords, Facebook, Twitter and Pinterest.

6.4.8 Actions taken by firms

The action taken depends on the workshop with 76% of participants reporting, in addition, an enhanced presence on Social Media. Actions include:

- Redesign of website
- Increased Facebook activity
- SEO finished for website
- More video content being used
- New photographs added
- Developing a content plan

- Started a blog
- Signed up for more workshops
- Using new techniques daily.

6.4.9 Key Performance Indicators

There were a set of specific KPIs set for the Digital Tourism programme (Table 6.2).

Table 6.2 Key Performance Indicators	
Measure	**Numbers of firms in sample**
Numbers of businesses making significant investment (>£500) on digital innovation as a result of accessing digital intensive or 1-2-1 support. This will include digital technology to improve operations or visitor experiences	12% (3*)
Numbers of businesses using social media effectively as a result of attending workshops and webinars	92% (23) said social media had generated exposure, 52% (13) said it had increased sales, 44% (11) said it has improved customer service and 16% (4) said it had increased international business. But not necessarily as a result of the workshop – there was no question on this. Note that only 5 workshop participants were on a specifically SM workshop.
Numbers of businesses reporting improvement of business operations as a result of participating in the programme's workshops, webinars, videos	80% (20) would recommend the workshops and many of the benefits reported could be classed as improved operations (22).
Numbers of businesses reporting better engagement with international markets (measured by increase in international visitors)	8% (2)
Numbers of businesses entering new international markets (measured by visitors from new international markets)	None
Numbers of businesses taking a strategic approach to integrating digital technologies within the business	100% of firms reported that digital technology was essential or very important to their operations

* The survey focused on Workshops as 1-1 support had not been formally launched. Two of the firms cited "website improvements" while the third cited "new phone". None of the respondents could quantify cost

6.4.10 Overview of Survey feedback

All of the surveyed firms were aware of the need to invest in the adoption of digital technologies and services, but seem to have struggled to identify how best to target this investment - they did not need an external party to spell out the importance of adopting digital technologies and services. Workshops were seen a credible source of information that gave firms the confidence to make a decision/take action.

Overall, firms derived a lot of benefit through their participation as can be seen from the rankings in Table 6.1. Firms' feedback indicates that these were generally worthwhile events to attend although the fall-off on the second day of the strategy workshops raises a question as to whether these firms derived full value. Some firms

went to more than one event which suggests they were deriving value and this was confirmed by significant evidence that firms were acting on the information they received.

There are two points to make regarding firms' investment on digital technologies and services. First, the KPI was designed to reflect the effect on firms' actions resulting from *intensive* digital support. We suggest that intensive support would include for example 1-1 advice and the opportunity to participate on Learning Journeys – neither of which have yet been delivered with intensity. Thus, we feel it is too early to meaningfully assess progress against this KPI.

Second, while just three firms indicated they had invested more than £500 on digitally related actions that were *directly* attributable to their participation, we feel that this underrepresents the Programme's level of influence - while firms did not cite directly attributable investments, many firms indicated that they were taking action to address digital issues and, critically, the feedback is clear that the Workshops gave them confidence in choosing the areas on which to focus. The scope covered by these actions was usually broad-ranging and significant for the firm. Thus, while the significant investment may not have been directly attributable to the workshop's content, the workshops were deemed to be credible sources of information that appear to have been influential in helping firms to target their investments.

We noted above the high level of firms' adoption of social media advertising and it was for this reason that we suggest a dedicated workshop on Online Marketing.

6.5 Summary Conclusion

The approvals process for Digital Tourism appears to have been straightforward but accepting that the funding period is longer than other DSBEP projects (ends June 2018). Digital Tourism comprises a more comprehensive offer than the other initiatives as it ranges from workshops through to intensive surgeries and Learning Journeys. Given the nature of the KPIs to be delivered by June 2018, it is important for these more intensive measures to be implemented speedily.

The principal KPIs relate to the more intensive inputs but these have yet to commence in earnest. Our review assessed the benefits of what has been delivered to date –

namely workshops. We would note that unlike other DSBEP measures, the project was not marketed principally through Business Gateway (supported by SE and HIE) but through Scotland's Destination Management Organisations.

Feedback from firms indicates that they found the workshops valuable, found them additional and had acted on information they gained.

Given the fall off in participation on the second day of the strategy workshops, there would be merit in reformatting the design of this session so that it can be delivered in one day. There may also be an opportunity to introduce a dedicated Digital Marketing workshop given firms interest in this area.

7 Digital Scotland Excellence Centre (#hellodigital!)

7.1 Rationale

The Digital Scotland Excellence Centre (DSEC) Programme attracted £306K from DSBEP and levered a further £34K of ERDF funds, bringing the total to £340K. The Centre was viewed as being a *national* project. The Centre hosted a programme of events and company engagements that were marketed under the #hellodigital! banner. The concept of the project was to create an inspiring and globally recognised facility, initially within the new HIE building on the multi-Partner Inverness Campus (An Lòchran). It was anticipated that the DSEC would operate as a national Digital hub and distributed model with spokes linking to international Partners. It would also develop existing collaboration with the private sector e.g. Microsoft and BT initially to help develop the service development.

The DSEC's potential, links with Partners and funding model would be further enhanced by the appointment of a Digital Excellence Manager whose role was to strengthen links with existing Partners and to secure the funding (including private sector and European funding) and resources to enable the project to develop. The ambition was to create a transferable and scalable network of innovative Digital Centres across Scotland and attract investment to showcase the 'art of the possible' through Digital technologies to businesses in Scotland.

The Board Paper suggested that the project aligns with the Scottish Government Digital Economy Review (2013) recommendation to create Digital Excellence and Demonstration Centres in Scotland. Also, with Scotland's Digital Future ambition to ensure that 'Scotland is well positioned to take full advantage of all the opportunities of the Digital age' by demonstrating innovative digital technologies, it was suggested that it would contribute to developing a digitally skilled and confident workforce and would position Scotland as an attractive destination for inward investment, innovative digital public services, digital inclusion and skills.

The DSEC's design would be shaped and utilised by all Partners on the Digital Scotland Business Excellence Partnership (DSBEP) and would demonstrate the

practical application of existing and innovative technologies in transforming the way we live, work and learn. A Steering Group was to be established for DSBEP representative organisations.

7.2 Aims

DSBEP funding support was sought to enable the development and implementation of a DSEC. The objectives were to:

- Create the first DSEC within the new Inverness Campus by October 2015 and to secure a temporary location at Centre for Health Science where all Digital Excellence Centre activities could be operated during the build and development phase.
- Create a blueprint for a Digital Excellence Centre and a transferable model that could be replicated in other locations across Scotland by March 2015.
- Recruit a Digital Excellence Manager to lead the project on behalf of HIE and the DSBEP, to further develop and enhance relationships with private sector and academia so as to secure resources and funding for the Centre;
- Source innovative technologies and resources for the Centre throughout 2014/15, including close links with the CREATE project 'DigiLabs; and industry partners, including Microsoft, BT and the potential Maklab collaboration in Scotland;
- Engage with DSBEP and Industry / Academic / Research partners on development, utilization and sustainability of the project on a weekly basis initially;
- Provide advice and intensive support to 400 businesses by March 2016 (120 businesses in 2014/15 and 280 businesses in 2015/16);
- Provide digital briefing sessions and events to 600 businesses (250 in 2014/15 and 350 in 2015/16);
- Hold two international conferences by March 2016 with CREATE project partners;
- Establish ten Academic / Research Links (including Innovation Centre and Catapult Centres) by June 2015
- Launch event x 1 when the Inverness Campus opened
- Industry links x 25 through existing partnerships and new collaborations by June 2015

- Undertake an interim evaluation of the project in June 2015 with recommendations for extending the Centre partnerships and resources to other locations in Scotland;
- Complete a full evaluation by June 2016 including business plan for the network of Digital Demonstration Centres by March 2016.

7.3 Survey findings

7.3.1 Observations on delivery

Several non-Highlands consultees questioned whether a physical facility could act as a strong locus for the promotion of digital technologies. We addressed this question in our survey design and comment on the findings below.

7.3.2 Sample Selection

Once duplicates and people who had participated in other programmes covered under DSBEP had been removed, the pool of contacts who had attended #hellodigital events comprised 160 names.

The information supplied to us on these contacts was as follows: Event attended; contact name; organisation name and email address. A total of 19 events were represented: for some of these, we had one or two attendee names while for others we had over 40 names.

To some extent, the nature of the event determined the nature of the attendance. For example, *Movie Making on Mobiles* attracted people from larger private sector organizations, public sector organizations, and also from one and two person micro-businesses. Events such as *Augmented Business: Health and Life Sciences* obviously attracted sector specific attendees.

The lack of more detailed contact information for attendees made it difficult to pursue contacts in order to obtain interviews. Unless obvious websites existed, getting phone contacts for people was not straightforward, so in effect, once several emails had remained unanswered we did not pursue target interviewees further. We also found about 10 names listed on the contact email had left their respective organisations.

We observed that attendees at some events were much more likely to respond to requests for a short interview than others. As a result, in the latter weeks of the survey we concentrated efforts on pursuing people from the events where we had not had a large response, so as to obtain a broader base of evidence.

We spoke to a total of 21 people who had attended events. A further three people agreed to take part but were not available at the time we had arranged to speak with them. One person agreed to answer a subset of questions by email but did not reply to these questions in time to be included.

7.3.3 How did people find out about the #hellodigital events?

There were two main sources of event information cited by attendees:

- A *direct email* (as they were on a mailing list) was mentioned by 38% of people, and *word of mouth* was mentioned by 33%
- Alerts from contacts within Business Gateway or Highlands and Islands Enterprise were mentioned by 14%.

Some people were actively looking for training or workshops: 10% of people said they found out about the events via an online search. Finally, 5% of the sample heard of the events via the press or another publication.

7.3.4 Which events did people attend?

As mentioned above, there were some events where we got a strong response to our request for interview, the main one being *Movie Making on Mobiles*. Out of the 21 interviewees, 11 had attended this event, with some people also attending other events. We also interviewed people who had attended:

- *Google Digital Garage*,
- The *Augmented Business* workshops
- The *Digital Making Showcase*
- *Cyber Resilience*
- Events covering Social Media, Website Design/Improvement, Data Analytics and Disruptive Devices.

Some interviewees weren't sure which event they had attended but knew broadly the topic covered.

7.3.5 Addressing Technical Challenges?

We asked whether people had attended events in order to address specific technical challenges within their work or their organisation. Although most respondents told us that their main reason to attend was just "general interest in the topic", 38% indicated that they had a specific technical challenge they wanted to address.

Most of those who said they wanted to address a technical challenge said that it had been an issue for them for about 3-6 months (62%). One person said it had been a more recent challenge (less than 3 months) and the remainder (33%) said they had been looking for solutions for longer than 6 months. Thus, like Cyber Resilience Vouchers, #hellodigital! Firms' issues had become priorities relatively recently.

The challenges included:

- gaining new skills in order to promote their business online,
- learning how to exploit social media,
- creating promotional materials (360 video and movie making on mobiles), and
- creating up to date curriculum material (science teacher).

Feedback on attendees' motivations include:

- Forming a network of local expertise, also finding out more about relevant technology.
- Looking at ways of improving what the Community Trust can offer residents
- Just general interest, working in a new sector and wanted to become more knowledgeable.
- Being keen to learn broadly how to improve their social media presence.
- Don't know what you don't know, so worth checking in to see if there's something you should be finding out about!
- Things they wanted to solve, new things to learn about...
- Finding promotional tools for the business.
- Creating promotional material for their website and YouTube channel.

- Need up to date information about technological innovation as part of school curriculum. Getting to see/hear about this kind of technology is what keeps young people in the Highlands - they could relocate to work and not see content as advanced as this, it makes the Highlands a more attractive place in which to live.
- Networking - met a lot of useful contacts, made links with other firms.
- Just interest, took colleague who helps with social media.

7.3.6 What did the workshop provide?

When asked whether they had gained new knowledge or insights as a result of attending the workshops or events, 50% said "Very much so" (10 on a scale of 1-10) (Table 7.1). The median response was 8.6 which emphasizes the value derived. A secondary measure of value would be the large number of multiple participations (where an individual attends more than one event) – there was a very significant level of multiple participations on #hellodigital!.

Table 7.1 Workshop Influence Influence of Workshop	Average Score (max 10)
Did the Workshop provide you with new knowledge or insights?	8.57
Did the Workshop provide you with new skills?	5.48
Did the Workshop enable you to see where you needed to take action?	7.4
Did the Workshop lead to you taking an action?	6.5

The responses in terms of whether people had gained new skills through attending the workshops were evenly split, with about half saying "very much so" and about half saying "not at all". This question tended to polarise responses, with only a few people saying they had gained "some" skills. This finding is not especially surprising as it reflects the extent of attendees' prior subject knowledge.

However when asked if the workshops helped them decide where they needed to take action, more people responded "very much so" (76% scoring 6 or more on a scale of 1-10, and 8 people scoring 10) with an overall rating of 7.4.

In terms of whether participants had taken an action as a result of attending, the median score was 7 out of 10, with 24% choosing the maximum score. This again is a powerful finding. Given that many people told us that they were attending the workshops "*out of interest*", "*for networking*", or "*to find out about the current state of digital technology*", these answers suggest that those who attended to further their knowledge were confident that they had learned or gained insights: however these attendees did not leave with new skills or with the intention to take specific actions. *Those saying that they had taken action as a result of the workshops were generally those who had attended in order to learn how to solve a specific challenge.*

7.3.7 Counterfactual - What would attendees have done if they had not attended #hellodigital!?

The majority of people (55%) interviewed said that they would have taken no alternative action had they not attended a workshop. Of those who said they would have still taken action, 32% said that it would have been less effective, and 13% said that it would have taken them longer to get to the same point. Nobody surveyed felt that they would have got the same outcome in the same timeframe by using their own resources.

7.3.8 Was the event held at An Lochran?

All but one of those we interviewed (20 out of 21) said that the event they attended had been held at An Lochran – the exception indicated that they had attended a launch event at a different venue which we assume was the temporary facility at the Centre for Health Innovation that was created while the current facility was being built.

7.3.9 Was An Lochran an incentive to attend the workshop?

For most people (48%), the fact that the event was at An Lochran did not have any influence on their likelihood of attending. However the new venue did have an effect with some: 33% noted that that it had "somewhat" influenced their attendance, and 24% said that finding out about the new centre was the main reason they attended.

7.3.10 Opinions about An Lochran

Accessibility: We asked those we interviewed to rate the facilities at An Lochran on a scale of 1 to 5 (low to high). In terms of accessibility, 70% gave it the highest possible score, and the average score was 4.6. Nobody rated the facilities lower than a 3 in terms of accessibility.

Facilities: All but one of those we interviewed rated the facilities at An Lochran at the maximum score with views being encapsulated in one respondent's comment "Extreme jealousy! It is a superb facility!"

Expertise of Staff: All but one of those interviewed rated the Expertise of Staff as either 4 or 5 (80% of people rated Expertise at 5 or High). One person gave expertise of staff a score of 3.

Quality of Events: 85% of those interviewed rated the quality of events at An Lochran as either 4 or 5. Two people rated quality of events at 3.

Range of Events: 65% gave the range of events the maximum score (5). Three people rated the range of events at 4 and three people rated the range at 3.

Where suggestions for improvement were made, these included:

- Parking could be better - visitor parking was limited and they had to drive down a track and park in a "field" quite a long way from the centre.
- Events were targeted at lower knowledge set, more beginner set, would like something a bit more challenging.
- Feel the staff are out of their depth on this particular topic.
- The toilets need more frequent checks: towels... Catering a bit clunky, not great food on the day.

7.3.11 To what extent does the existence of the facilities at An Lochran encourage people to attend future events?

Having attended an event or events at An Lochran, 81% of respondents said that they would be either somewhat or definitely likely to attend a future event there. Only 19% said that it would make no difference at all to whether they attended events in the future, so it appears that the venue is having a positive impact on those who attend.

7.3.12 One to One Assistance

Some of the events offered people the chance to avail of a 1-1 session with an expert after attending the event. We asked those we interviewed whether they had availed of this option.

Only two people had availed of 1-1 support. Of the remainder, some said they thought they'd had 1-1 support, but on further discussion they said they had had some 1-1 time during the workshop or seminar: this was particularly the case with those who attended *Movie Making on Mobiles*.

Of the two who had received this support, only one could remember who had provided it (a name). In terms of duration, both who had 1-1 support said it was less than an hour's input. They felt that this was about the right length of time - neither felt that more time on the topic would have been helpful.

Both of the respondents who had received 1-1 support said that, as a result of the input, they had identified clear actions they could take. These actions were (respectively)

- the creation of a 360 degree video for promotional purposes, and
- updating website using WordPress skins, plus some very helpful Facebook usage tips.

7.3.13 Would you recommend the events to another person or firm?

The majority of respondents (90%) said that they would recommend the events (and several told us that they already had) – No-one said that they would not recommend them. Two people said that they *might* recommend them, but that it would depend on the person and the event (they felt some events varied in terms of how demanding or technical they were).

7.3.14 General comments

Comments can be summarized as follows:

- "Although a proportion of the material was familiar, there were lots of "wow, I didn't know that!" moments"

- One person told us that they felt many people who would be a target audience for the events and workshops might not attend because of perceptions about the events. "People are put off because (a) they think it will be a sales pitch and (b) they feel it will be too advanced for them."
- In contrast to this comment, we received spontaneous feedback that the events were accessible and that interviewees were looking forward to attending more of the events. One person commented : "there has been an event covering pretty much every single thing I've wanted to learn about". This is reinforced by the level of repeat participation by attendees.
- There were several comments about the value of getting people to look beyond their local networks. "Creates good overview - gets you beyond your local outlook". Quite a few people mentioned that the events offered good networking opportunities and helped to build links between local businesses.

7.3.15 Respondent Provided Suggestions

We asked whether those interviewed had any suggestions about future events.

- "Do more! It's an investment in the Highlands economy that will pay back!"
- Promote the events on EventBrite
- #hellodigital Roadshow: put it on the road, and going as remote as they can, especially Island communities.
- #hellodigital is a valuable resource for schools. Run the events annually so each student cohort can benefit.

7.4 Summary Conclusions

Although relatively few people responded to requests for interviews, the majority of those who did had attended more than one workshop, and in some cases, up to 5 workshops. This, in itself, shows how keen people were to participate again after their first experience.

Informal feedback from all but three people was positive, and in some cases, glowing. A message that came across in slightly different words but from a lot of interviewees was that they were very happy indeed to have such a state of the art facility available to them (and by implication, they had previously felt that the Highlands and Islands

was falling behind the rest of the UK in terms of access to this sort of cutting edge information and training).

There was a variety of organisations represented in our survey. Many were one-person businesses, some were voluntary sector organisations and some were involved in different ways with the Tourism sector. However, although there were a significant number of very large organisations (both public and private sector) on our initial contact list of attendees, it did not prove possible to persuade any of the attendees from these organisations to speak about the workshops they had attended. This means that the feedback we received may reflect the views of specific types of organisation: however the benefit these organisations gained through attending workshops meant that their attendance had a significant effect on their business.

Three interviewees, who each considered themselves as being experts in a specific Digital technology area, felt that An Lochran could have used expertise of people living in the Highlands and Islands to improve the content of events. Given their view, this feedback tended to be less positive. Of all the #hellodigital! respondents, these individuals were the only ones who were not completely positive about the events they had attended. It may be worth investigating local expertise in terms of giving local content to future events, both in order to utilise local expertise and in order to demonstrate to others attending events that the Highlands and Islands is actually more advanced in terms of digital technology than they may believe.

It was suggested that some of the events could work as a "roadshow" and that this would be greatly valued by people working and living in more remote areas (Islands in particular).

While people interviewed often said they felt the Highlands and Islands was not at the cutting edge, their knowledge and use of available technology did not always match this belief. Linked to this, a proportion of interviewees felt that some of the workshops might be "too advanced" for them – despite being able to benefit from the quite advanced workshops they had already attended. Some way of helping people to match their current level of skill with which workshops they could benefit from most would be helpful.

Every interviewee wanted more workshops, repeats of previous workshops and "level 2" workshops following on from those they had already attended indicating very strong engagement and perceived value.

8 Digital Economy Maturity Index

While the background to the Digital Economy Maturity Index (DEMI) has been outlined in Chapter 1, it is worth noting its aims again here:

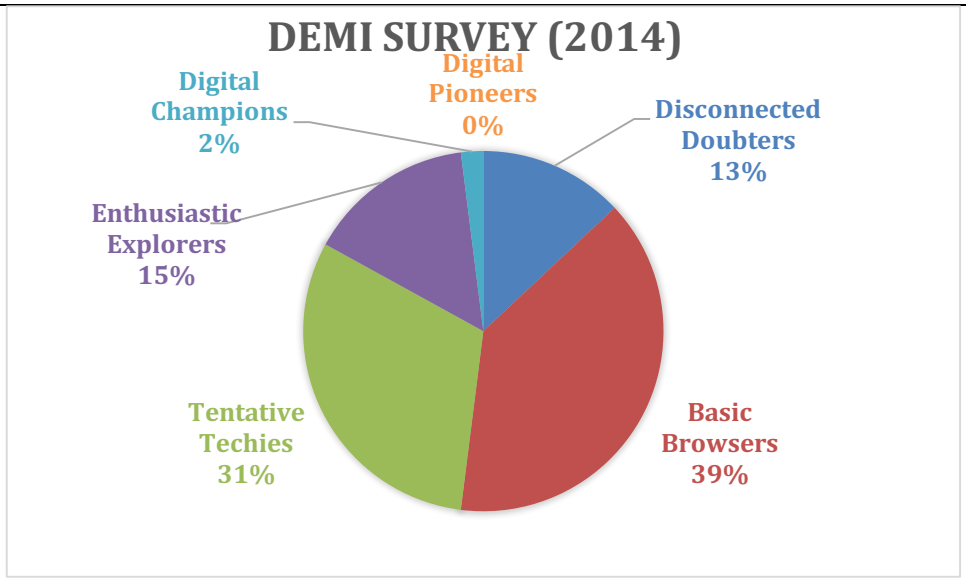
- To measure the level of digitisation of Scottish businesses and segment the business population into levels of digital maturity.
- To establish the characteristics of businesses in each segment and identify the opportunities to develop their use of digital technologies based on their strengths and challenges.
- To measure progress of digitisation of Scotland's businesses over time.

Scotland's DEMI has been constructed using a range of indicators from the Digital Economy Business Survey 2014 (DEBS) and these are presented in Appendix 1.

The index consists of four main strands:

- Adoption
- Usage
- Benefits
- Skills

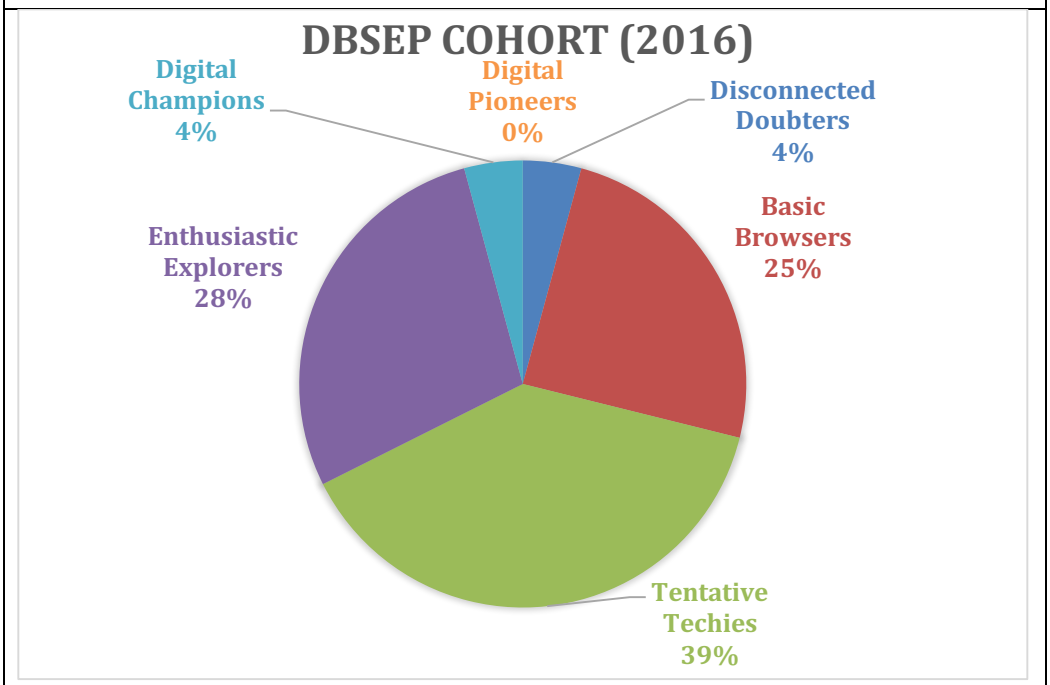
Figure 8.1 Distribution of DEMI Scores (2014)



The strands have a total of 12 indicators, where each indicator has been given a score based on its relative importance in terms of digital maturity. A maximum score of 100 can be achieved.

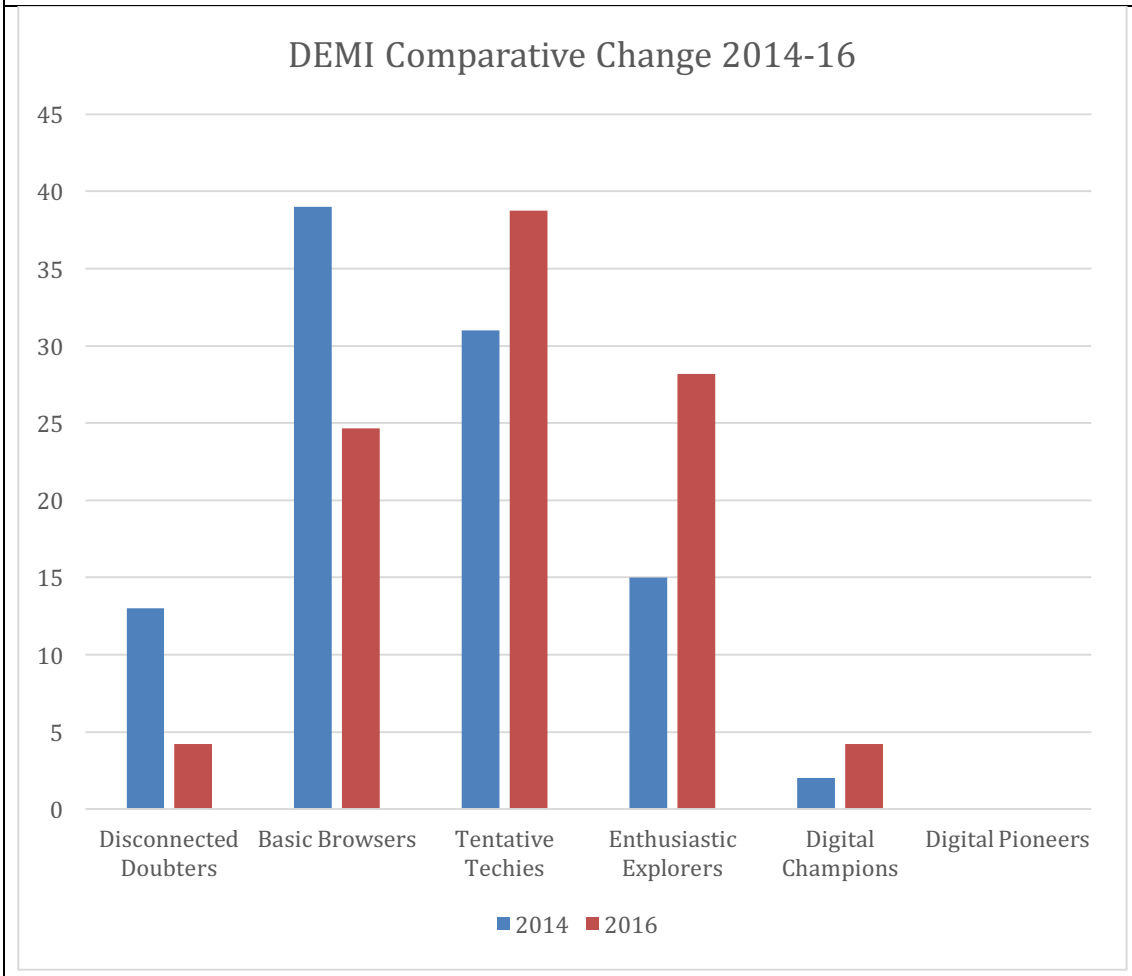
The DEMI survey indicates that the (2014) positioning of Scotland's business base is presented in Chapter 1, while that for the DSBEP review cohort is presented below (Fig 8.1).

Figure 8.2 - DEMI Scores of DSBEP Survey firms (2016)



It can be seen that there is a marked difference between the two distributions of DEMI categorisations across the two charts, with those in our 2016 review being notably more "digitally sophisticated". Figure 8.3 provides a different perspective using the same data sets.

Figure 8.3 - DEMI Scores of DSBEP Survey firms (2016)



There are some caveats that should be noted when comparing the two sets of findings:

- The DEBS survey of 2014 engaged 4,002 firms while our review engaged 151
- Our Review sample may not be representative of the population of Scotland's firms as these were firms who were sufficiently motivated to seek help from Business Gateway, SE or HIE and to engage in the DSBEP initiatives - so they may be a more digitally aware or proactive sub-group
- (Some of) the improvements are due to inputs the firms have received through DSBEP initiatives – thus there is a post DSBEP effect and while the extent of this effect cannot be quantified, we are fully aware from our interviews of its presence.

Virtually all firms were aware that they needed to take "digital actions" and that by doing so, they were likely to improve the performance of their businesses. In addition,

firms were able to cite benefits from having participated on the Programmes. Thus, we feel that the improvement in DEMI scores is down to both the types of firms that have engaged and the actions they took as a result of their engagement. In this regard, the DSBEP measures can be deemed to be having a positive effect.

The key observations relating to the key DEMI metrics are summarised below.

8.1.1 Internet Connection

The bulk of the connections are standard broadband over telephone line (43%) with Fibre Optic being the next more common (33%). Standard over Cable and High Speed over Cable were each cited by 11% of respondents. The high proportion of Broadband over telephone line is to be expected given the size profile of the firms – most are micro-businesses. Just one in five firms (80%) had changed their broadband connection within the past 12 months.

It was striking how frequently firms cited problems with their broadband provision. While issues with speed and reliability were commonly cited (speed being frequently reported to be well below that advertised) the issue that seemed to be most frustrating for firms was getting access to suitable provision when the firm's exchange was "superfast" enabled but the firm was too far from the cabinet to get a reliable connection. This was an issue in both the Lowlands and the Highlands and Islands. And while it was a particular issue in rural areas, it was also cited by firms in urban areas too (for example Aberdeen Oil & Gas Innovation Park). The poor response of BT, who firms described as being a "monopoly supplier" in many instances, was viewed as compounding the problem.

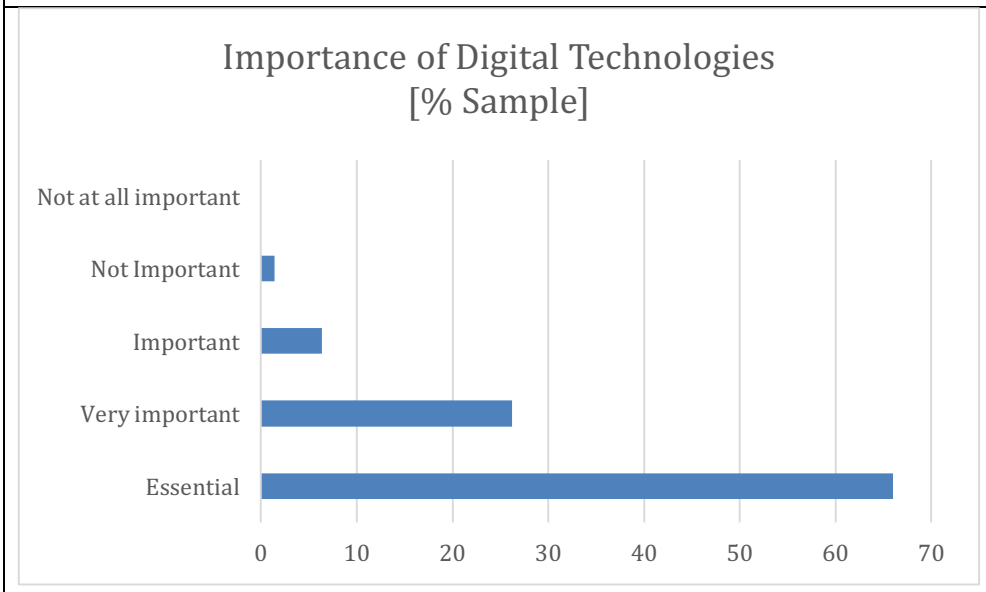
Poor or unreliable bandwidth is a fundamental issue and key finding of this review as firms indicated when covering other DEMI questions that there was no point in them considering the adoption of more sophisticated digital solutions such as cloud-based services, on-line CRM, VOIP or video-conferencing as their internet connection was not sufficiently robust for them to be able to utilise these technologies consistently.

8.1.2 Importance of Digital Technology

A total of 91% of firms identified digital technologies as being "very important" or "essential" for their business. This profile was consistent across the five Programmes

reviewed and emphasizes that there is awareness of the need to embrace digital technologies by all firm types

Figure 8.2 Firms' rating of the importance of Digital Technologies



8.1.3 Technology Used

Six types of digital technologies were assessed: Website; Social Media; Mobile Technologies; Cloud Use; Analytics; and Management Software.

The feedback indicated that:

- Websites were the most frequently cited (98%) which is to be expected
- Social Media was the next most frequently cited (94%), again as would be expected. Within this technology grouping, Facebook was the most used, but twitter, Vimeo, Google+, YouTube, were also used by firms. A small number cited LinkedIn - while these numbers were smaller, some made very significant use of this platform
- Mobile technologies – apart from smartphone use, mobile technologies were less frequently cited and where they were, the commonest utilisation was through internet connected tablets or through "tethering" laptops/tablets via a mobile (smart) phone

- Cloud Based Services were used by 70% respondents, typically DropBox but also Google Drive, e-designers, iCloud – a couple of firms had cloud-based stock systems and CRMs.
- Analytics were cited by 30% (42 firms) firms but the responses were skewed notably in favour of Digital Voucher beneficiaries who had used the support to enhance the functionalities of their website - 74% (31 firms) of those who cited use of analytics were Digital Voucher beneficiaries
- Business functions and management software was cited by 27% of firms – in contrast to the "Analytics" respondents, those using cloud based management software were more evenly spread across the sample.

8.1.4 Integration of Technology

One of the key DEMI questions related to the extent to which assisted firms saw Digital Technologies (as defined by the six technology areas in para 8.1.3 above) as being integral to their business operation. Each firm was asked to assess "how central" these technologies were. The maximum score available was 30 and the average recorded was 13 with a median of 14.

Websites and Social Media were the principal technology areas cited – the remaining four areas had less adoption by firms.

8.1.5 Engagement with Public Services

The questions relating to use of Public information were split according to: *accessing information from public sources* (one-way); *engaging/trading with public sector bodies* (two-way). The findings indicate most firms access Public sector sites to acquire information (one-way). A much smaller proportion engage or trade with public organisations, and those that do frequently cited Public Contracts Scotland as their primary portal. This is used as a central portal by public bodies in Scotland for tendering.

8.1.6 Strategy for Using Digital

Less than half (43%) of respondents had a Digital Strategy for their use of digital services. Furthermore, many of those who suggested they had a strategy noted, when pressed, that it was informal - very few had prepared a formal, written document.

8.1.7 Benefits from using Digital Technologies

These questions assessed a range of potential benefits that firms might derive through utilising each of the technologies presented in para 8.1.3. The maximum score available to firms for these questions was 12.

In terms of the sample's responses, the Average was 5.4, Median 6, and Mode 9 (30 firms). This is interesting as it indicates that for those who do derive benefit from using Digital Technologies, the benefits tend to be high as the responses are skewed in favour of their adoption.

8.1.8 Digital Technologies as Driver for Innovation

The bulk of firms use Digital Technologies (and "the internet") to keep apace of technical developments and monitor competitor activity. This mostly involves passive actions by the firms – there is less proactive activity such as seeking customer feedback.

8.1.9 Proportion of Internet Sales

Firms' scores increased according the proportion of sales made over the internet, with the maximum possible being 5. Based on the feedback, the Average score was comparatively low (1.24) with Median and Mode both "0". This reflects the conversations we had with firms where, other than those who were benefitting from Digital Voucher support that helped to enhance the e-commerce functionality of their businesses, most firms were not selling over the internet.

8.1.10 Digital Technology driving Internationalisation

There were two perspectives captured through these questions: has firms' *use of internet increased the number of international markets serviced?;* and whether their *website was tailored to foreign customers?*.

If a firm was using the internet to service international markets, their score would be 4 as it would be if they had tailored their website to foreign customers (giving a total possible score of 8). The Average score recorded was 1.66 (Median and Mode both "0") indicating that comparatively few firms had taken action to internationalise their digital presence for international markets.

8.1.11 Digital Skills gaps

This was a very interesting question to discuss with firms. Firms could score a maximum of 3 (in those cases where they had no skills gaps). The Average score was 1.83 with a Median and Mode of "2" each. Firms indicated that they had gaps but were managing to cope.

How firms coped with these gaps was the striking finding. While 43% of respondents indicated that they would "(re)train current staff", by far the commonest response (including for those who anticipated taking proactive training action), was to:

- Recruit (younger) people who had these skills in future
- Buy-in specialist expertise as and when required.

In terms of the latter, most firms currently had established relationships with IT and website developers and it was these firms whom they saw providing future solutions. This finding has an implication for how SE, Business Gateway and Skills Development Scotland responds as while the firms recognized they had notable skills gaps, over two-thirds did not see training current staff as being the primary solution to the challenge they faced.

8.2 Attribution of DSBEP to firms' DEMI scores

We asked several questions around attribution to assess where the DSBEP measures were having an influence. The following charts provide useful insights.

Figures 8.3 and 8.4 indicate that Digital Tourism, Digital Vouchers and Digital Boost had a notable impact on changes to Social Media uses and, correspondingly on Analytics.

Figure 8.3 – DSBEP influence on Social Media

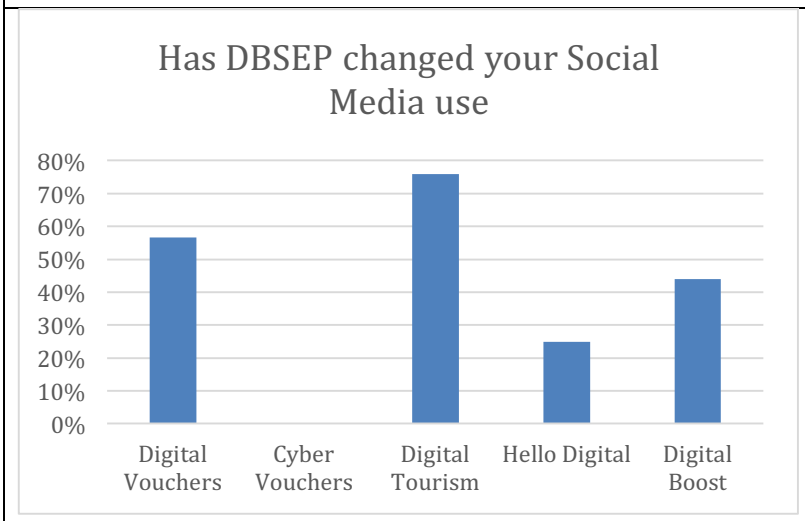
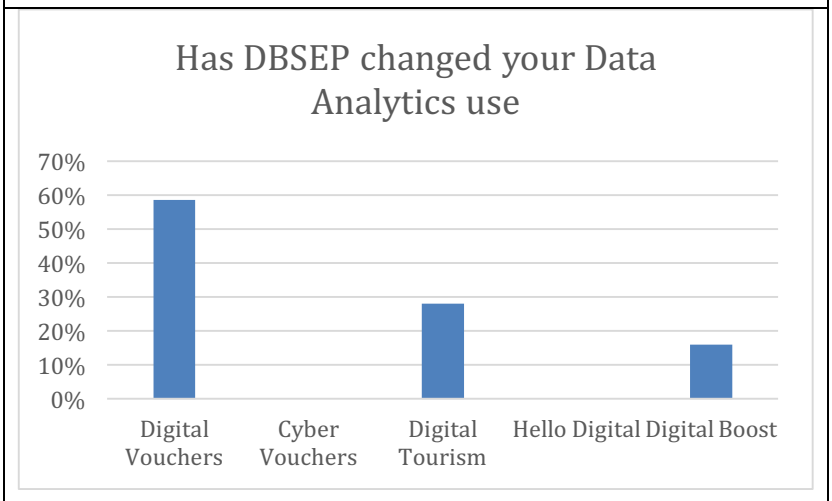


Figure 8.4 – DSBEP influence on Data Analytics



Digital Vouchers in particular had an impact on firms use of Cloud Computing (although it was also influenced by other DSBEP measures – Fig. 8.6), Software Solutions (Fig 8.7) and Internet Technologies (Fig 8.8).

Figure 8.5 – DSBEP influence on Mobile Tech Usage

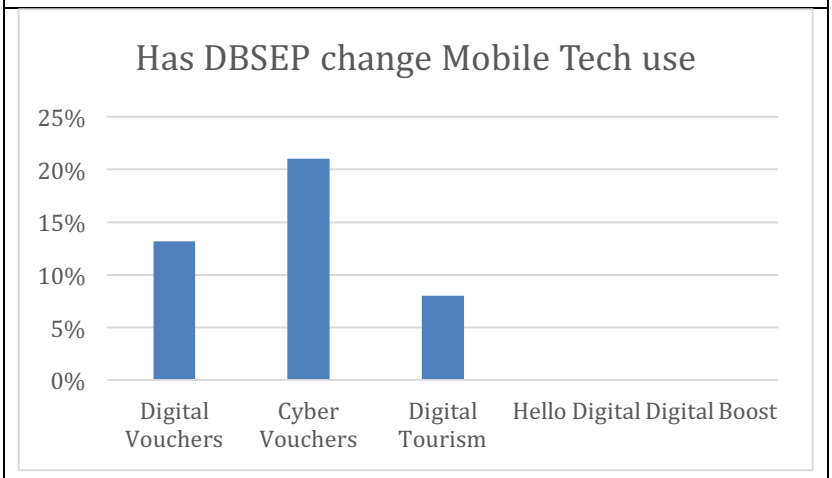


Figure 8.6 – DSBEP influence on Cloud Computing Usage

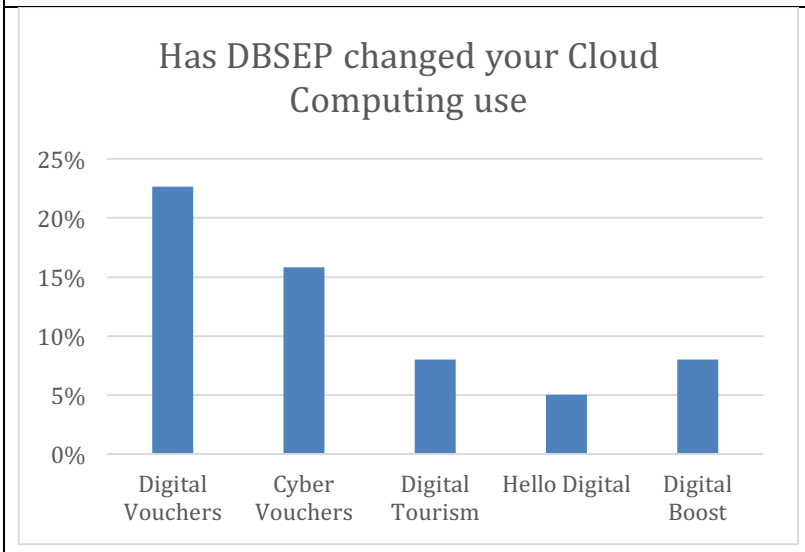


Figure 8.7 – DSBEP influence on Software Solutions Usage

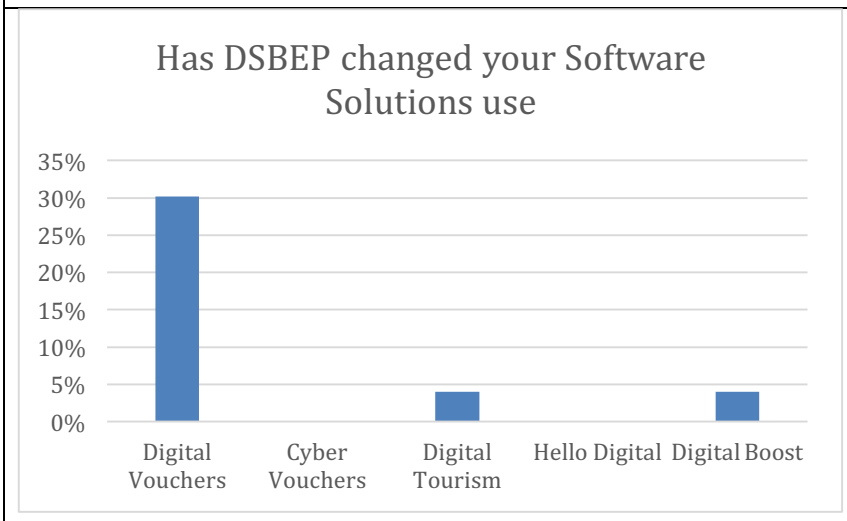
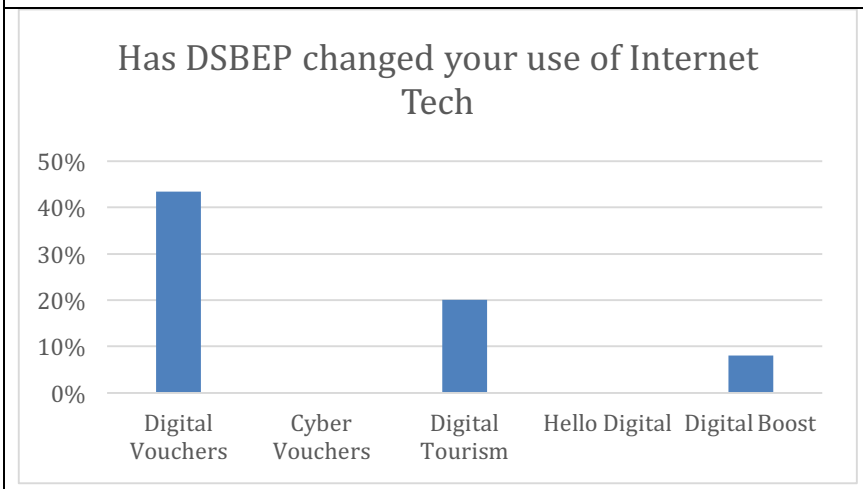
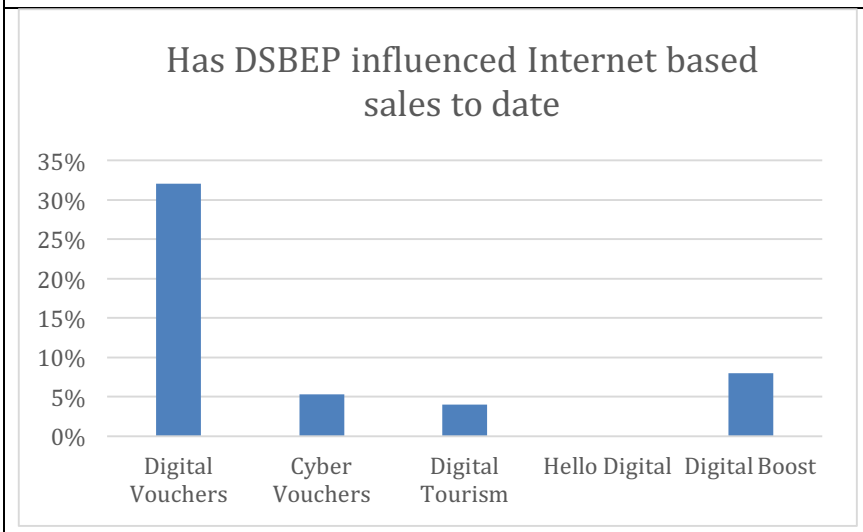


Figure 8.8 – DSBEP influence on Internet Tech Usage



Digital Vouchers also had a specific influence on the proportion of firms generating internet based sales (Fig 8.9) with just under one third of Vouchers respondents citing a change to date. Given that the Vouchers provide firms with financial resources to invest in these digital technologies, their high influence is to be expected.

Figure 8.9 – DSBEP influence on Internet Sales (to date)



Overall, it suggests that the positive change in DEMI scores noted by firms has been influenced by their participation on DSBEP measures.

9 General Observations

9.1 Availability of contact data

There was a specific and significant issue regarding the availability of contact data for the survey. As consultants, we were aware that firms might have participated on more than one DSBEP measure and we were keen to ensure that these multiple participants only received one approach from us when arranging interviews. Our desire to minimise duplication was shared by Scottish Enterprise and Partners. The long-list of contacts numbered 2,362 entries. However, some projects, notably #hellodigital!, had significant numbers of multiple engagements, so the number of individuals participating was notably lower.

Assembling the contact data set was not at all straightforward. Our first request for a dataset was made at the beginning of September 2016. There then followed a lengthy process of clarification and prompting to acquire, check and revise the information we received. Throughout this stage of the review, all organisations were supportive – but their individual response times, the quality of the data received and different approaches to assembling and reviewing the datasets introduced a ten week delay that had a significant and detrimental effect on the progress of the review.

We were not in a position to start to contact firms until mid-November 2016, and even at that point, the data set available was sub-optimal. For example, it took several iterations of request before the Digital Vouchers list included the email addresses *and* contact names.

Table 9.1	Sources of Contact Details			Survey Control Required?
	Scottish Enterprise	Business Gateway	Highlands & Islands Enterprise	
Digital Boost	✓	✓	✓	Yes
Cyber Resilience Voucher	✓			Yes
Digital Voucher	✓			Yes
#hellodigital!			✓	Yes
Digital Tourism	✓			Yes

The key learning point from this aspect of the review is that project managers should compile their beneficiaries' datasets *in advance* of the evaluation/review being undertaken *and* these datasets should be de-duplicated at this stage. If the consultants are required to de-duplicate beneficiaries' data, this should be explicitly stated in the Invitation to Quote.

9.2 Quality of contact data

None of the datasets had contact telephone numbers and many of the email addresses provided were "personal" rather than corporate addresses (e.g. johndoe@yahoo.co.uk). The availability of telephone numbers is a standard requirement for all evaluation surveys, but was particularly relevant for the DSBEP target group given they were predominantly micro and small businesses with poor web presences. Even where the firm had a website, several only provided a contact form (no number). If the contact had provided a personal email address, it was usually impossible to find a website corresponding to the email.

The lack of contact telephone numbers and the prevalence of personal email addresses influenced the firms we targeted for interview, with those having a corporate or company email address being favoured.

In terms of learning for the future, considerable value and efficiency can be extracted through a review where the contact information contains:

- Organisation
- Contact name
- Contact email and telephone
- Nature of assistance
- Timing of assistance
- Financial value of assistance to firm/individual where appropriate.

9.3 Firms' availability

The DSBEP target group comprised largely micro and small businesses operating in service sectors (including Lawyers, B&Bs, Hairdressers etc) with very limited spare capacity to speak. In advance of undertaking the survey, our Business Gateway

consultees in particular observed that previous market research had high levels of attrition with consultants engaging a relatively small proportion of those approached for interview. For this reason, we offered interview slots in the early morning, during and after normal office hours. Despite this, firms with 1-4 employees were typically harder to engage in the survey that those that were slightly larger.

In terms of learning for the future, it should be anticipated that extra time will be required to complete reviews where the support is delivered to large numbers of small businesses.

10 Conclusions & Recommendations

10.1 Rationale

The rationale for the intervention was framed by the *Scotland's Digital Future, A Strategy for Scotland* and confirmed by the analysis of the DEMI Survey which showed that over 80% of firms scored 50 or less out of 100. Scottish Enterprise was asked to manage a budget of £7 million to support activities that would enhance SMEs Digital competencies and the DEMI research confirmed that Scotland's firms were notably underperforming in this regard:

- A quarter did not have a website
- A third had not adopted mobile technologies (including smartphone use)
- Only half had engaged in social media
  - but just 1/3 had used data analytics
- and only a quarter used cloud computing.

The findings of the DEMI research complemented with members' feedback to The Federation of Small Businesses. Our consultation with the FSB indicated significant interest amongst its members for support with digital technologies, especially those that would help firms avoid or respond to cyber attacks.

10.2 Observations on firms' engagement

Firms' engagement was strong. None of the firms in the sample questioned the role of digital technologies, the need for the firms to adopt them or that they should be taking action. Where challenges were noted, they tended to be around:

- Understanding *how to identify* the technologies appropriate for their business
- Understanding how to make best use of Digital Technologies
- Accessing the resources to help them take action to incorporate appropriate technologies within their business.

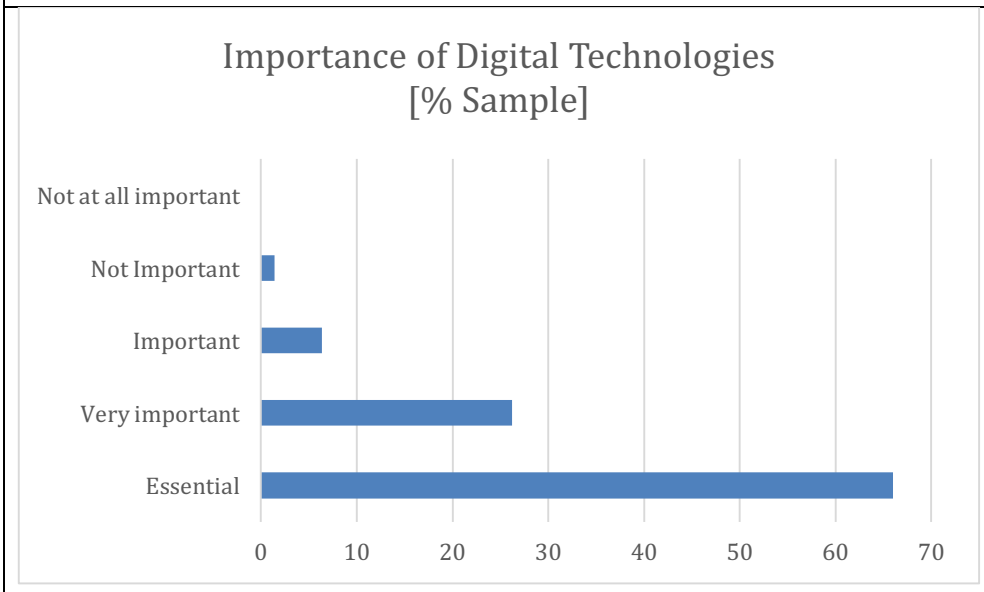
Accessing resources and developing capacity were particular issues for Digital Boost and some Digital Tourism/#hellodigital! firms. This feedback may have been influenced by the scheduling of the five individual projects – Digital Boost, while including 1-1 support, did not provide firms with a resource to help them implement any form of change. Rather it directed firms to the areas they needed to address.

While this was extremely valuable for firms, it was not always enough for them to take action. The logical scheduling of DSBEP projects would have seen Digital Boost, Digital Tourism and #hellodigital! launch be largely implemented first with Digital Vouchers, Cyber Resilience Vouchers and to an extent, the intensive elements of Digital Tourism coming later. The fact that this did not happen in practice may explain this aspect of the firms' feedback.

10.3 The influence of the Projects on firms' activities

Significantly 91% of firms cited the availability and use of digital technologies as being either *very important* or *essential* (two thirds of firms said it was "essential"). Thus, firms know this is an important area for them.

Figure 10.1 Firms' rating of the importance of Digital Technologies



It was clear that while the funded activity (Digital Vouchers and Cyber Resilience Vouchers) had an attributable impact on firms' actions, attributable actions were not limited to those firms that had received grant support - the other projects also led to significant attributable action by firms. Those who attended Workshops (Digital Boost, Digital Tourism, #hellodigital!) commented on the high quality of the events and also cited action they had taken as a result.

In terms of digital technologies used, **Websites** were the most frequently cited (98%) followed by **Social Media** (94%) which is to be expected. Within the latter grouping, while Facebook was the most used, firms also cited Twitter, Vimeo, Google+, YouTube, and a small number cited LinkedIn. **Cloud based services** were used by 70% respondents (typically DropBox but also Google Drive, e-designers, iCloud) – a couple of firms had cloud-based stock systems and CRMs. **Analytics**, when cited, were virtually all associated with maximising the value of the adoption of website rankings and social media, in particular Facebook advertising.

There were notably fewer firms embracing other digital technologies **(Mobile technologies, Analytics** (for production management etc) and **Business functions and management software**). Where these technologies were cited, their adoption tended to be by those who had received Digital Voucher support.

A key observation is that while firms were aware of the potential importance of digital technologies, their challenges were:

- Obtaining appropriate and expert advice on how best to use it within the context of their businesses – this is where the DSBEP projects were strong
- Creating or acquiring an appropriate level of resource to support their adoption – depending on the respondent, the effect in this regard was mixed.

The finding that firms are aware of the need to take action, but not sure what to do or do not have the appropriate resources available, could inform future DSBEP marketing. *If* our sample is representative of the population of firms as a whole, it points to less of a need for general awareness-raising messages.

Workshop attendance and 1-1 support[10] led to a significant level of action by firms in all of the projects. Respondents indicated that 1-1 support was good for answering or addressing a specific question they might have had relating to their business. The #hellodigital! participants who took a subsequent action tended to be those who came to the seminar with a specific challenge for which they were seeking an answer.

[10] 1-1 input for #hellodigital! comprised circa 1 hour dialogue with the seminar leader, so was less intensive to that provided through Digital Boost

The projects improved firms' confidence in decision making. They were assessed as being highly additional – firms would not have acted in a similar way had they not participated. Projects encouraged firms to take action – this included where firms attended workshops and seminars as well as 1-1 support. The influence of workshops on actions was surprisingly positive. Projects with Voucher elements are particularly effective in this regard too.

10.4 The impact of the Partnership

The Approvals paper highlighted two key aims for the Partnership, namely:

- To improve co-operation amongst the Partners
- To improve the co-ordination of service delivery.

We discussed these two types of projects level impact when interviewing them.

10.4.1 Impact on Co-operation

Consultees were clear that the Partnership had a significant impact on co-operation between members and virtually all felt that the correct organisations and representatives were engaged in it. Given that the group had to mobilise from a 'standing start', the lead time for consensus to be reached on where to focus and agreeing how best to proceed took longer than people would have liked. Non-Scottish Enterprise consultees questioned whether the level of project appraisal was appropriate at this stage. There was also comment on the complexity of the procurement processes followed. These challenges aside, there was a consensus that the Partnership worked well and that it should continue.

10.4.2 Impact on Co-ordination

There was less consensus on the extent to which the Partnership had facilitated improved co-ordination of delivery across the Partner organisations. The reasoning behind these comments appears to be that SE took the lead in designing the interventions and, separately, that the delivery was viewed by non-SE members of the Partnership as being unduly complex in certain instances.

Business Gateway in particular noted that there was an opportunity to have greater co-production going forward and that this would enhance the efficiency of the delivery process.

10.5 Insights on delivery to date

This was a complex initiative and a first for many of the Partners – it took much longer than anticipated to establish the projects. While this was viewed as frustrating, in hindsight it was accepted that the appraisal process was helpful. That said, there may be benefit in looking back at appraisal and procurement approaches to see if they might be shortened if faced with a similar challenge again.

All five projects have been implemented as planned to greater or lesser extents:

- Digital Vouchers and #hellodigital! progressed very well and have exceeded target expectations (in terms of total numbers to be engaged)
- Digital Boost and Cyber Resilience Vouchers progressed well but were a bit behind profile at time of review (in terms of total numbers to be engaged)
- Digital Tourism launched an active workshop programme in partnership with the Destination Management Organisations but hadn't initiated the more intensive 1-1 support or learning journeys by the time of interview – this project is different from the others as it is funded to June 2018 and we understand that it is planned to start implementing the next phase of the project imminently.

We appreciate that the scheduling of projects did develop as originally intended. It was recognised that it would have been more appropriate for the projects that focused on helping firms to identify where action might be of benefit should precede those providing financial resource to help the firm to take the actions.

10.5.1 DSBEP Recommendations

Recommendation: The Partnership should continue to meet and operate after March 2017 when current funding ends.

Recommendation: If the Partnership considers further projects targeted at the "volume" market, SE should explain the use of "Stage Gate" appraisal processes to partners and use the feedback captured through this review to show its value to designing robust and relevant projects

Recommendation: When designing future interventions, the Partnership should adopt a "co-development" approach to their design.

Recommendation: If repeating a similar approach again, the Partnership should give early thought to the method of employing members of a Project Office so that their contractual arrangement is as straightforward and streamlined as possible.

Recommendation: Standardised procurement and delivery approaches should be adopted across Scotland where possible and appropriate.

Recommendation: If repeating a similar approach again, the Partnership should endeavour to schedule "audit" type programmes before measures that provide financial assistance to firms to support their digital actions.

10.6 Project Summaries

The sections below provide Project specific observations.

10.6.1 Digital Boost

The sample captured feedback on both 1-1 support and workshop attendance. Workshops were rated very highly and deemed to be valuable – they led to firms taking tangible actions which we view very positively as normally, firms tend to report that such events are good principally for information gathering.

Digital Boost comprised four elements – a Healthcheck, access to On-line Guides, Workshop Attendance and (up to three days) 1-1 support. The feedback suggests that the Healthchceck was seen primarily as a compliance requirement to be completed to access the 1-1 support. Firms could not recall accessing the On-line Guides explicitly (although several in Lowland Scotland described documents which were sent to them by the contractor and that sounded like On-line Guides but the firms could not confirm). Thus, the benefit derived mostly from their attendance at Workshops or through the 1-1 inputs. This finding raises a question on the value and promotion of the Guides in particular.

For Digital Boost 1-1 support, there was difference in the feedback from SE and HIE areas.

- Commendium (SE) appears to have adopted a relatively structured and consistent approach to their 1-1 activity: Meet client; Review systems; Agree scope of their input; Deliver support; Review and sign off. There are typically 2-3 meetings with the firms. Firms described the input as being tailored to their specific needs and satisfaction was relatively high
- For HIE firms (PA Lead Contractor with delivery subcontracted), the scope of challenges presented to the advisors appears to have been broader. Several firms had just one meeting with the advisor. Generally, the inputs were described as being less intense, "high level" and "non-specific". In many cases, reports were described as "generic" or "non-specific" with one firm suggesting that "the advisor did not make any recommendations as he had been advised by his superiors not to do so". Satisfaction was mixed and mostly lower.

The support in SE's area led to most firms taking actions to date. Firms also planned to take notable actions in the future. The HIE support generally had not led to attributable actions having been taken, but in some cases, firms did plan on taking a future action.

When considering general observations, firms in HIE's and SE's area noted:

- They felt a little "short changed" as the three days input included travel time – they expected to get a full 3 days and
- As they were very small, they would have liked assistance with implementation. This was especially true for firms embracing Social Media actively for the first time.

Recommendation: If repeating a similar approach again, the Partnership should consider excluding consultants' travel time from the three days allocated to firms.

Recommendation: Actively promote the value of Workshops to firms and encourage participation independent of 1-1 support.

Recommendation: Highlands and Islands Enterprise should review the scope and intensity of the 1-1 support that is offered to firms in the region.

10.6.2 Digital Voucher Programme

Beneficiary firms were mainly micro businesses and had been thinking about addressing their business challenge for six months or longer. Voucher was generally 75% of total cost of project, and often but not always to the limit of £5,000 - not always as some activities the firms wanted covered were not eligible, but that was not usual.

Firms had been through the process of preparing a brief with three specialists responding with proposals for the contract. Most projects focused on new websites with ecommerce where appropriate. There was also a lot of work to introduce/bring firms up to speed with social media.

The consultants' input mostly involved technical build of (new) website - firms had very basic and "old-fashioned" websites previously and the vouchers helped to increase their functionality.

In many cases, there was visual design input as well, usually in partnership with the firm, plus advice on functionality and in a few cases taking photographs and developing text for the website as well.

In terms of Outputs, these varied. The formal sign-off process had been followed, but in addition there was a mixture of short report, written guidance, conversations and a fair amount of training to give the firm the skills to maintain and update the website. Many firms stated the complete website was the end of the project – this would seem appropriate given that vouchers were designed to help firms take action. For those projects categorized as *Implementation* or *Digital Services*, the inputs tended to be hands-on advice and inputs to firms.

Scottish Enterprise support led to most firms taking actions, but there is a lot of linked activity planned for the future - in many cases the work that has been done under the Voucher was so central to the firm that they needed time to bed the new systems in and cope with increased traffic/sales before moving on to next phase.

The activity/changes were practically all attributable to the support received, which will generate a high degree of impact. In most cases the additionality was significant: the firm either would have done nothing without the support or would have "tried to do something but it would have been less effective" - usually in-house, or only being able to afford less specialised support to enhance rather than rebuild the website. And it would have taken longer.

The predicted impact was large, with the main benefits being increases in sales, improved and more professional image, wider geographic market reached (including international). Many firms have a continuing relationship with the specialists, paying them to provide further support once the Voucher funded input has been delivered.

Overall, there was extremely positive feedback about the Voucher support and experience - almost all firms were happy to recommend the support to another firm. Digital Vouchers were very well received and delivering important support that will generate significant impact for the beneficiary firms.

Recommendation: Record Smart Objectives categorisations when approving projects for funding.

10.6.3 Cyber Resilience Voucher Programme

Most companies who get this support were *not* looking to respond to or address a specific security breach or attack. Most of the assisted firms used the Voucher to gain accreditation so as to boost their brand image and, to a lesser degree, attract new customers. A few firms availed of the Voucher as they had a tender or client who required it.

In terms of the benefits firms derived, most said they liked the fact that an objective third party could evaluate their existing systems and recommend improvements. Some firms liked the fact that they now have a security policy which they can communicate to staff and customers and this improved their professional image. A few firms suggested that they did not get much benefit mainly because their existing systems were already strong.

Firms were happy to recommend it to other companies. Most cited benefits similar to those cited above, namely that:

- A 3rd party could evaluate their existing systems and recommend improvements
- They now have a security policy which they can communicate to staff and customers.

The additionality of support was high with almost half of respondents indicating they wouldn't have taken any action had the cyber voucher not been available

All companies interviewed used a 3rd party specialist (which is unsurprising as it is effectively a requirement of the Programme). One firm, who had been approved for support, did not proceed with it as they wanted to use their mainstream provider of IT support and did not want to risk engaging an unknown third party to review their security.

Companies had different degrees and variation to which they used digital technologies within their businesses. But all rated digital technologies as essential or very important to their businesses.

10.6.4 Digital Tourism

As with the feedback from firms engaged in the other projects, all of those surveyed recognized the importance of Digital technology to the future of their business. Most heard of the existence of the workshops through a Destination Management Organisation.

Almost all found workshops useful and would recommend them to others. Few firms have used Digital Scotland resources but those who did found them good.

Workshops were highly rated:

- Though feedback highlighted the mixed ability of those attending and we feel that it might be good to have a beginners and advanced level (a similar suggestion was made by those attending #hellodigital! events)
- Almost all complain about poor (slow, intermittent) broadband provision.
- Almost all are using social media

- Those who aren't know they should be but don't have time.
- Some have used Facebook Ads to good effect and we suggest that it might be worth doing a dedicated workshop addressing online advertising and that covers Adwords, Twitter etc too.

Few of the firms have a strategy as such but all plan to do more. Most firms use the cloud but mainly just to store files or for email (Dropbox, Office 365 and Google Drive). Use of Data Analytics is limited to monitoring website traffic (using Google Analytics mainly).

Recommendation: Consider introducing Digital Marketing workshops for firms.

Recommendation: Introduce a "Traffic Light" coding for workshops provides participants with an insight on the level of technical ability required.

Recommendation: Push on with implementing the project's "intensive" 1-1 measures so as to maximise the likelihood of achieving all KPIs by June 2018

10.6.5 #hellodigital!

While individual participation numbers are very high, a very significant proportion were repeat attendees. We view this as a positive finding as it indicates that participants are deriving value through their attendance (as they keep coming back).

There was positive feedback on the events, their content and their value. Specifically, schools were very positive and suggested that HIE should be run these events at times when teachers and students could attend – this points to perhaps running schools specific events

Firms felt the Programme provided Highlands and Islands businesses with exposure to experts whom they would not reach otherwise (without travelling to London or other metropolitan cities) – this is a key aspect of its added value. There was a general hunger for more of the same amongst those who attended

Firms liked the fact that #hellodigital at An Lochran was nice venue and a good facility to have in the Highlands and that it added value - but it was not deemed essential. Several respondents in more remote locations suggested there should be a mobile roadshow. A lack of sufficient car parking at An Lochran was cited by some as an disincentive.

The *Movie Making on Mobiles* and *360 video making* events were most attractive to those who had a relatively basic understanding of digital technologies. They were rated very highly. This group felt some other events required higher technological understanding to make best use of them and they suggested that a Traffic Light coding system (representing required technical sophistication) would be valuable in helping potential attendees to decide which would be appropriate for them.

Everyone who received 1-1 post event support had a specific issue to discuss. Virtually all of those who received 1-1 support took an action as a result (i.e. their issue or query was addressed through the event or 1-1 input).

A surprisingly large number of those interviewed were taking action solely as a result of their attendance at the workshops.

Those attending the higher technological content events (Google, IBM etc) tended to be harder to please mainly because they already had a good understanding of the topics and were more critical in the assessment of their contents.

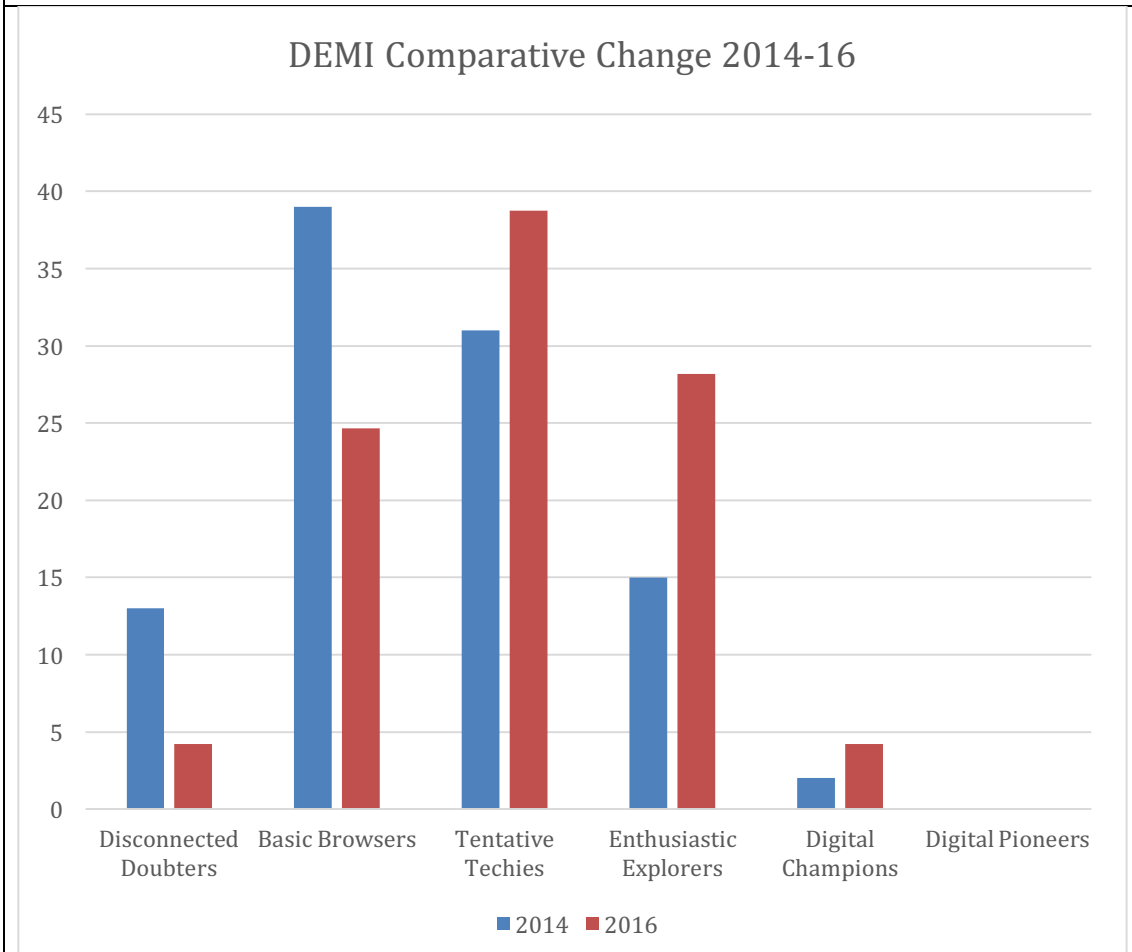
Several quoted of #hellodigital "This is a good way for HIE to spend its money".

Recommendation: Introduce a "Traffic Light" coding for workshops provides participants with an insight on the level of technical ability required.

10.7 DEMI score for the DSBEP Sample

It can be seen that there is a marked difference between the two distributions of DEMI categorisations across the two charts, with those in our 2016 review being notably more "digitally sophisticated". Figure 10.1 provides a different perspective using the same data sets.

Figure 10.1 - DEMI Scores of DSBEP Survey firms (2016)



There are some caveats that should be noted when comparing the two sets of findings:

- The DEBS survey of 2014 engaged 4,002 firms while our review engaged 150.
- Our Review sample may not be representative of the population of Scotland's firms as these were firms who were sufficiently motivated to seek help from Business Gateway, SE or HIE and to engage in the DSBEP Projects - so they may be a more digitally aware or proactive sub-group
- (Some of) the improvements are due to inputs the firms have received through DSBEP Projects – thus there is a post DSBEP effect and while the extent of this effect cannot be quantified, we are fully aware from our interviews of its presence.

10.7.1 Digital Skills needs

Firms gave conflicting feedback in terms of skills. Most identified notable skills constraints but few were intending to train existing employees as a consequence – rather they would either recruit those with the required skills in future or "buy-in" specialist inputs when needed.

10.7.2 Broadband connectivity

Poor or unreliable bandwidth is a fundamental issue and key finding of this review as firms indicated when covering the DEMI questions that there was no point in them considering the adoption of more sophisticated digital solutions such as cloud-based services, on-line CRM, VOIP or video-conferencing as their internet connection was not sufficiently robust for them to able utilise these technologies consistently.

We suggest that any future incarnation of the Partnership should have improvements in broadband provision as a key priority.

10.7.3 Influence of DSBEP on DEMI related actions

Feedback on attribution indicates that use of Social Media and Analytics are the areas of greatest DSBEP impact to date. Digital Vouchers led to firms taking actions that resulted in an increase in internet based sales, amongst other benefits.

Recommendation: Provide feedback to Scottish Government Infrastructure Directorate on the experiences of businesses attempting to access reliable broadband and the fundamental challenges our research suggests they face.

Recommendation: Consider specific packages to support firms' skills recruitment and enhancement.

10.8 Overall Assessment

This review of five elements of the Digital Scotland Business Excellence Partnership's project activity highlights high levels of satisfaction across a very broad spectrum of business support interventions. It is clear that all elements of the DSBEP offer were

additional and led to firms taking appropriate actions to enhance their digital presence. As would be expected, the Voucher-based projects were most notable in this regard. The improvement of DEMI scores was particularly striking. This feedback provides a degree of quantitative evidence on the uplift in value derived by assisted firms.

Consultation feedback from partners indicated early frustration with the rate of progress and the application by Scottish Enterprise of its Staged Gate project appraisal process in particular. However, when allocating the £7 million budget, the Scottish Government made clear that Scottish Enterprise was responsible for ensuring that the money was spent appropriately and effectively on all partnership-related activity.

In overview, based on both the consultation feedback and the survey evidence from firms, the activities of the Partnership appear to have been very effective and have clearly contributed to improving the digital competitiveness of firms that were engaged.

Appendix 1 – DEMI Categorisations

Digital Maturity Index – Indicators, sub-indicators and scores			
Indicator	**Sub-indicator**	**Score**	**Max score**
Adoption			
Type of internet connection	* NGA (<24 Mbit/s)	4	4
	* Standard broadband	2	
	* Internet not broadband	1	
	* No internet connection	0	
Overall importance of digital technology to current operations of business	* Essential	4	4
	* Very important	3	
	* Important	2	
	* Not important	0	
Usage			
Technologies used	* Website	1	12
	* Social media	1	
	* Mobile internet and technologies	2	
	* Cloud computing	2	
	* Data analytics	3	
	* Management software	3	
Integration of technology into business	* Essential (9-10)	5	30
	* Very important (7-8)	4	
	* Important (5-6)	3	
	* Use but not important (3-4)	2	
	* Use but not at all important (1-2)	1	
Engagement with public services online	* Obtain information	1	11
	* Obtain printable forms	2	
	* Return filled in forms electronically	2	
	* Carry out transaction digitally	3	
	* eTendering	3	
Strategy for use of digital in delivering business	* Yes	2	2
	* No	0	
Benefits			
Benefits experienced from using digital technologies	* Website	1	12
	* Social media	1	
	* Mobile internet and technologies	2	
	* Cloud computing	2	
	* Data analytics	3	
	* Management software	3	
Using digital technology to help innovation	* Researching competitor products online	1	6
	* Researching and gathering market data online	2	
	* Collecting customer feedback via website or social media	3	
Proportion of sales made over the internet	* All - 100%	5	5
	* 80-99%	4	
	* 60-79%	3	
	* 40-59%	3	
	* 20-39%	2	
	* <20%	1	
	* None	0	
Internationalisation	* Use of digital technology has increased the number of international markets exported to	4	8
	* Website tailored to international markets	4	
Skills			
Digital technology skills gaps	* No skills gaps	3	3
	* Some skills gaps	2	
	* Considerable skills gaps	1	
	* Not applicable	0	
Doing anything to develop employees' digital skills	* Yes	3	3
	* No, but planning to in future	1	
	* No, and not planning to in future	0	
Total max			**100**

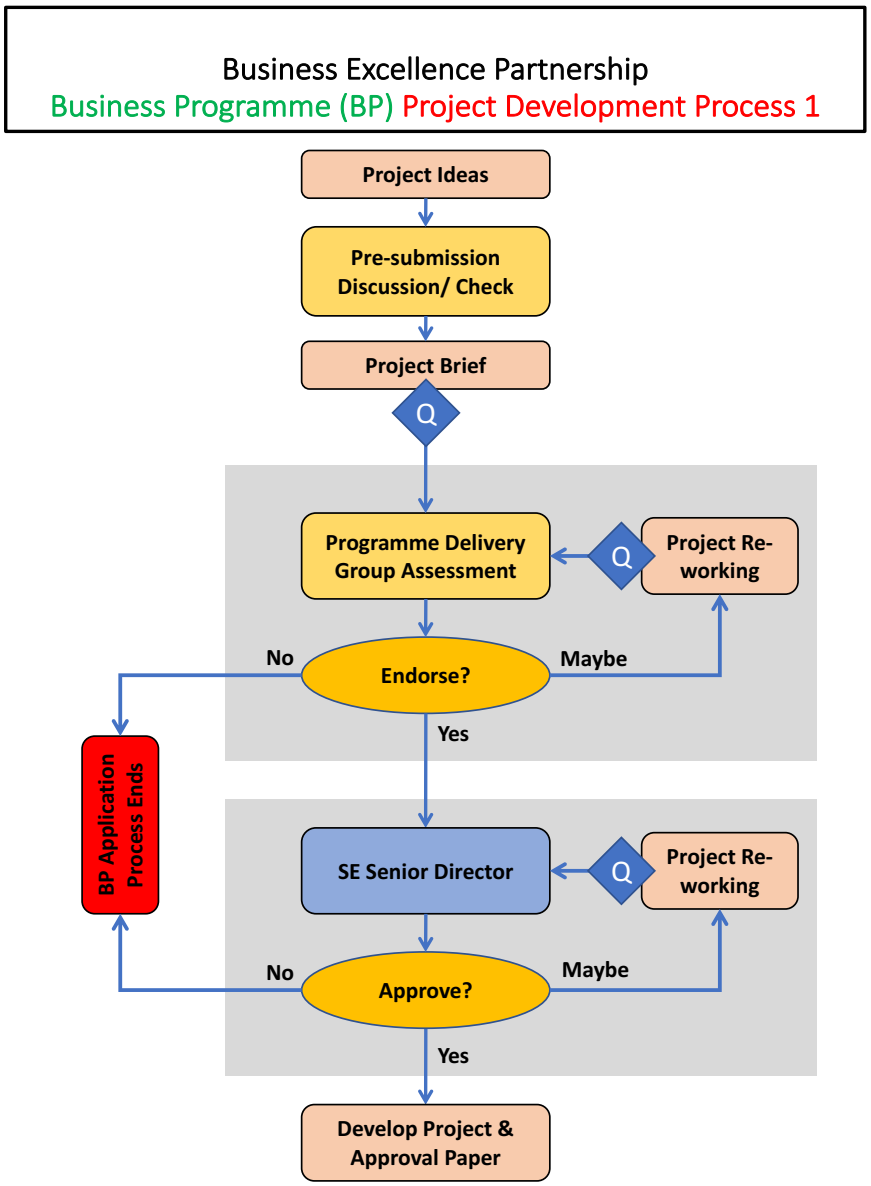
Table 8.1 – DEMI Categorisations

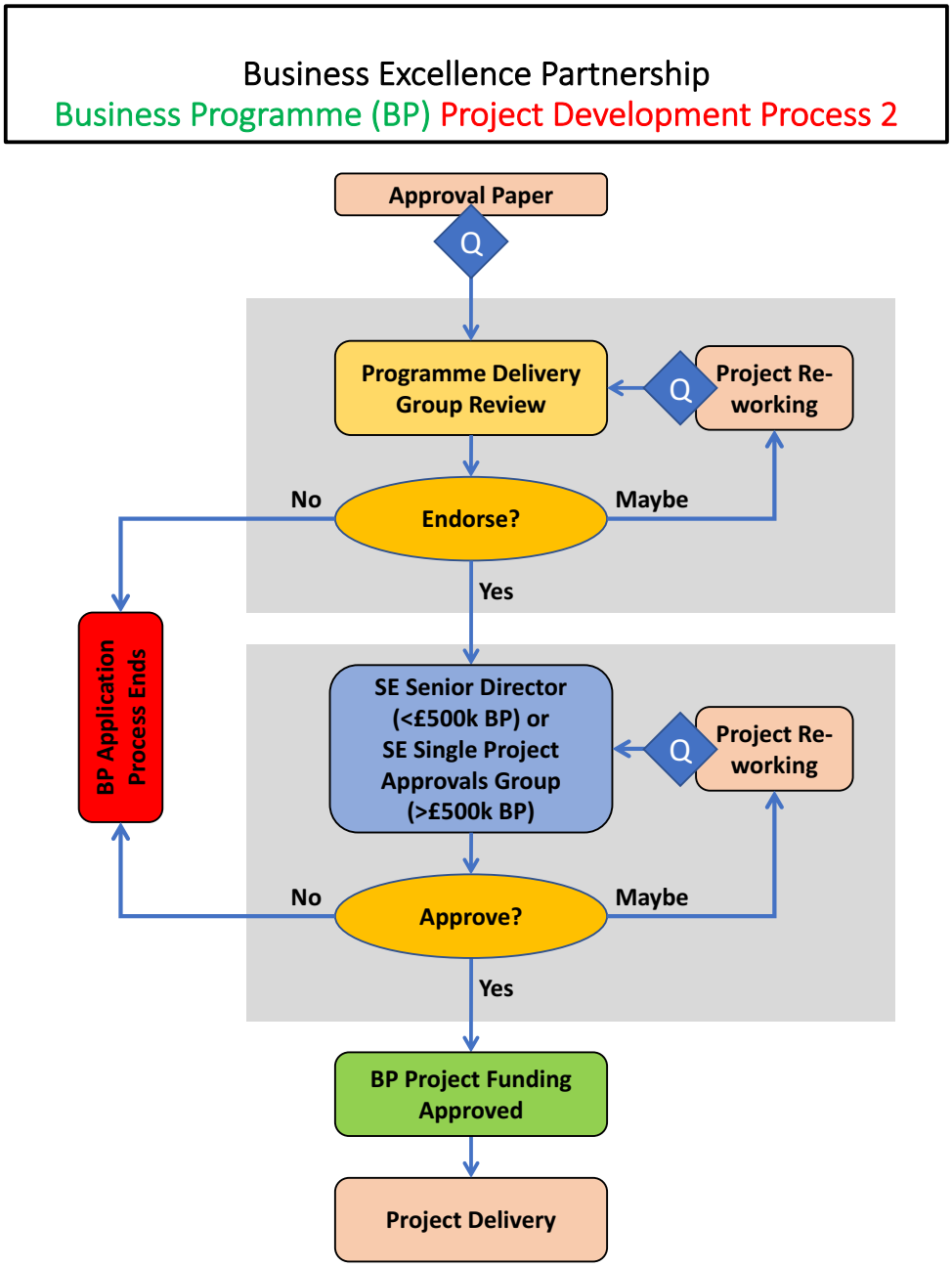
Segment	DEMI Score
Disconnected Doubters	0-15
Basic Browsers	16-33
Tentative Techies	34-49
Enthusiastic Explorers	50-66
Digital Champions	67-80
Digital Pioneers	81-100

Appendix 2 - Consultees

Neal Rafferty	Scottish Government
Russell Stevenson	Scottish Enterprise
Graeme Rennison	Scottish Enterprise
Alan Johnstone	Scottish Government
Hugh Lightbody	Business Gateway National Unit
Stuart Mackinnon	Federation of Small Businesses
Ian Blewett	Scottish Enterprise
Catherine Lamont	Scottish Enterprise
Marta Eizaguirre	Scottish Enterprise
April Conroy	Highlands and Islands Enterprise
Paul Foley	Scottish Enterprise
Gillian Cameron	South Lanarkshire Council
Theresa Swayne	Highlands and Islands Enterprise
Corinne Stewart	Scottish Enterprise

Appendix 3 Project Appraisal Process




Business Excellence Partnership
Business Programme (BP) Project Development Process 2
Approval Paper
Q
Programme Delivery Group Review
Q
Project Re-working
No
Endorse?
Maybe
Yes
BP Application Process Ends
SE Senior Director (<£500k BP) or SE Single Project Approvals Group (>£500k BP)
Q
Project Re-working
No
Approve?
Maybe
Yes
BP Project Funding Approved
Project Delivery

Appendix 4 - DSBEP Governance