

DIGITAL ECONOMY BUSINESS SURVEY 2017

Executive Summary
Highlands and Islands: March 2018



Ipsos MORI
Scotland



Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean



INTRODUCTION

In 2017, the Scottish Government, in partnership with HIE, Scottish Enterprise and Skills Development Scotland, commissioned the Digital Economy Business Survey (DEBS). This aimed to build upon the findings of the 2014 baseline DEBS study, and to provide an understanding of the level of digitisation of Scotland's businesses, allowing for benchmarking and progress to be measured over time.

The survey offered insight into the areas where businesses may require extra support to improve their adoption and exploitation of digital technology, exploring themes such as adoption and use of digital technologies, internationalisation and e-commerce, use of digital public services and digital skills. It also looked at the collaborative economy and cyber resilience – two new topic areas that have come to the fore since the 2014 survey.

This report presents findings from businesses located in the Highlands and Islands region, benchmarked against Scotland where possible.

APPROACH

The survey fieldwork was conducted between 11th September and 23rd October 2017, with a total of 3,258 businesses across Scotland participating in the survey. This included a boost of 1,000 businesses in the Highlands and Islands, resulting in overall inclusion of 1,209 businesses from the region. Data was weighted to ensure a representative sample of the business population by size and sector, as defined by the Inter-Departmental Business Register (IDBR).

The survey results were used to refine and update the Digital Economy Maturity Index (DEMI). This model was constructed by applying different weightings (based on relative importance to digital maturity) to core indicators derived from the survey questions (up to a maximum score of 100). Businesses are segmented into six categories, depending on their calculated level of digital maturity (Table 1).

Table 1: DEMI Segments and score bands

SEGMENT	DEMI SCORE BAND
Disconnected Doubters (the least digitally mature)	0-10
Basic Browsers	11-30
Tentative Techies	31-49
Enthusiastic Explorers	50-66
Digital Champions	67-80
Digital Pioneers (the most digitally mature)	81-100

KEY FINDINGS

CONNECTIVITY

Internet connectivity in the Highlands and Islands was high, with almost all businesses (97%) now having an internet connection. The nature and speed of connectivity appears to have advanced significantly since the last survey in 2014, with a rise in the number of businesses in the region with superfast broadband (at least 30 Mbit/s) (from 6% to 30%). However, adoption of superfast broadband still lags the rest of Scotland, which saw an increase from 12% to 44%.

USE OF DIGITAL TECHNOLOGIES

Use of digital technologies among Highlands and Islands businesses broadly reflect those seen among businesses in Scotland overall. The level of use varied, ranging from 70% using mobile internet and technologies to just 11% who used software solutions such as Enterprise Resource Planning (ERP) or Customer Relationship Management (CRM)

software (Figure 1), and only a small minority (4%) used all six of these technologies. While the level of use varied depending on the digital technology in question, findings highlight a growth in some areas of digital engagement. Since 2014, there has been a significant increase in use of social media, mobile internet and technology, and cloud computing. Websites are no longer the most widely used source of digital technology, signalling a move away from this more traditional format towards newer methods of digital engagement that make use of mobile connections and social networking tools, as well as use of alternative e-commerce platforms such as third-party websites.

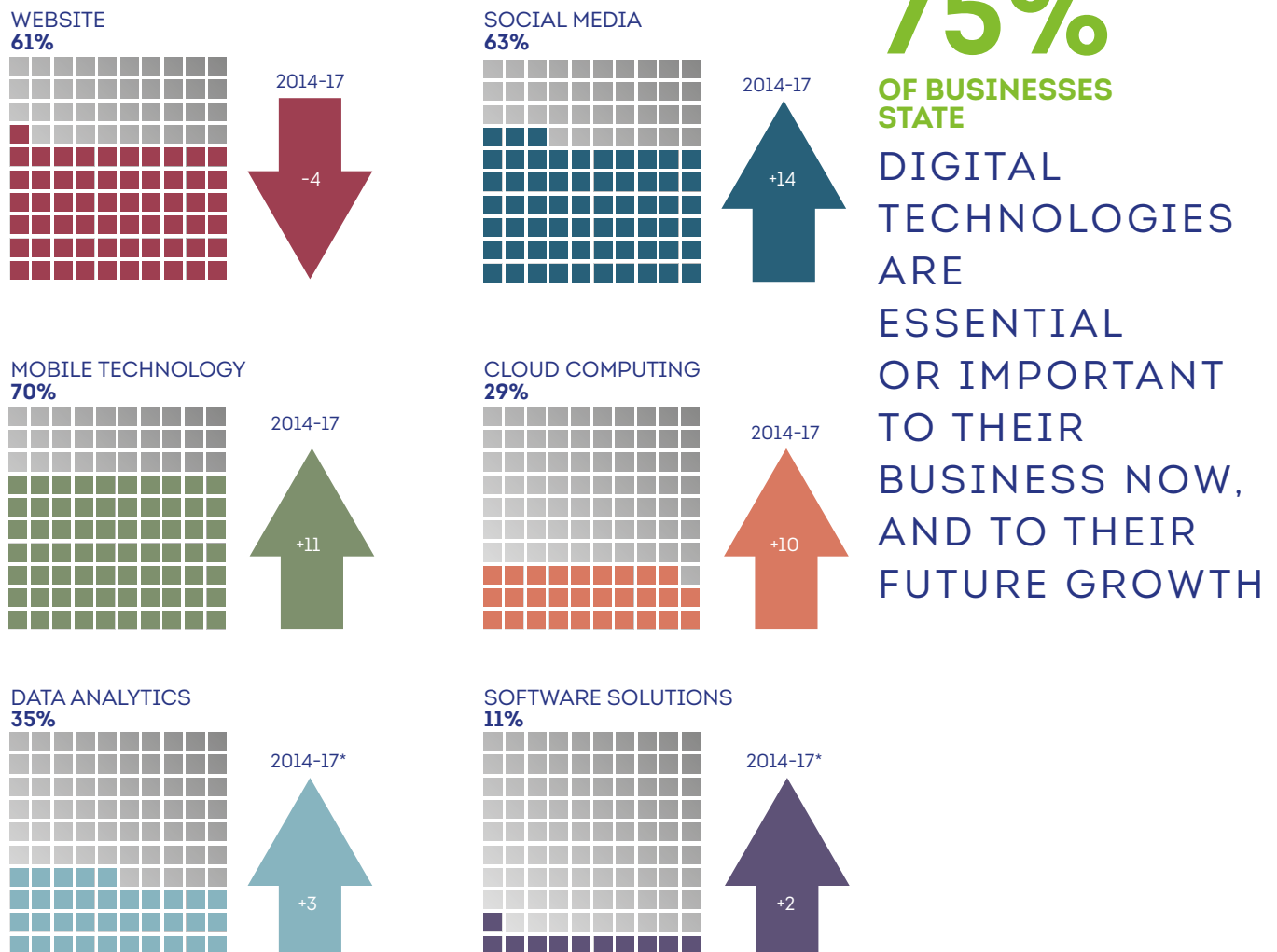
Certain types of business demonstrated higher levels of digital technology use than others. Larger businesses (with 250+ employees), and those working in creative industries and tourism were more likely to use certain technologies, namely social media, mobile and data analytics.

Among those that do use digital technology, businesses have emphasised benefits such

as increased exposure and raised profile, to increased responsiveness to customers, and more efficient working practices for staff (such as remote access). The range of benefits available to businesses were reflected in views on importance of digital technologies, with a majority saying they were either essential or important to their business currently (75%), and to their future growth and competitiveness (75%). This is similar to Scotland overall, where 78% cited digital technologies as essential or important to their current and future business operations.

In spite of most businesses acknowledging the importance of digital technologies, the majority (80%) did not have a specific plan or strategy in place for making use of these resources. This was a slightly higher proportion than that seen for Scotland as a whole (76%), and highlights a potential gap between the importance placed on digital engagement and the extent to which businesses are actively planning to keep on top of and make best use of technology.

Figure 1: Proportion of businesses using each digital technology



Base: All businesses (1,209)

*for Data analytics and Software solutions, changes over time are not statistically significant

75%
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TRADE

The level of international trade carried out by Highlands and Islands businesses had increased since 2014 (17%), with around a quarter (23%) of businesses in the region now selling goods or services outside the UK. The proportion in Scotland increased from 18% to 24%. International businesses tended to be larger, and working in the tourism or creative industries sectors.

International trade was linked with digital engagement, with those businesses that had used each form of technology being more likely to sell internationally than those that had not used the technology (Table 2). The greatest differences related to company websites, social media and data analytics.

In addition to international trade, a third (34%) of businesses in the Highlands and Islands sold goods or services outside of Scotland but in the rest of the UK (rUK), lower than the level seen for all Scottish businesses (44%). As with international businesses, those trading in rUK tended to be larger, and working in tourism or creative industries.

Around two-thirds of regional businesses (63%) operated only in domestic markets (Scotland), compared with 54% nationally. A higher than average proportion of these were food and drink businesses (72%).

E-COMMERCE AND ONLINE PLATFORMS

In line with activity seen in Scotland as a whole, a third of Highlands and Islands businesses (32%) carried out e-commerce, but their sales tended to be in small volumes. For most, the level of e-commerce had remained relatively stable over the past 2-3 years, but one in five had increased their activity, while only a small minority had seen a decrease. E-commerce was not restricted to those with a company website highlighting the important role played by other digital marketplaces and platforms, as well as social media. Looking to the future, the vast majority expected to continue to conduct e-commerce, and at higher volumes than currently.

E-commerce was more prevalent in the tourism (61%) and creative industries (59%) sectors. It was also higher among businesses operating in international (66%) and rUK markets (55%).

In terms of the relationship between internationalisation and e-commerce, opinion was mixed. When asked whether e-commerce had increased the number of international markets they were able to export to, around a third agreed while a similar proportion disagreed.

One of the more recent advances in the digital marketplace, the collaborative economy, appears to be in the early stages of uptake among businesses. Only a small minority operated as an online collaborative platform (4% and 3% in Scotland overall), and use of such online platforms was also uncommon.

The survey measured engagement with online public services by exploring use of Scottish Government, Scottish Local Authority or Scottish Government agency websites. Online engagement with public services was higher for businesses in the Highlands and Islands, than for Scotland overall, but had fallen since 2014.

CYBER SECURITY

The majority of businesses in the Highlands and Islands (91%) used cyber security technical controls such as malware protection (88%) and boundary firewalls (70%). Most (92%) had also used cyber security technologies such as anti-virus software (90%), content filtering (41%), Data Loss Prevention (DLP) (41%) and Security Incident and Event Monitoring (SIEM) (22%). Findings were largely consistent with Scotland, except for DLP and SIEM, which were used slightly more frequently at national level (47% and 27%).

Three quarters (75%) of businesses felt that they were fully (26%) or somewhat (49%) equipped with the relevant skills within their team to protect against and deal with a cyber security threat (77% for Scotland overall). There was correlation between cyber resilience and digital engagement: those engaged in fewer digital technologies were more likely to be poorly equipped or not at all equipped than those engaged in more digital technologies.

Table 2 – International trade and use of digital technology

	USE TECHNOLOGY	DO NOT USE TECHNOLOGY	BASE
DIGITAL TECHNOLOGY	% SELLING OUTSIDE UK	% SELLING OUTSIDE UK	
Website	33	7	753
Social media	30	11	763
Mobile internet and technology	26	17	842
Cloud computing	34	19	355
Data analytics	35	16	431
Business function, management or efficiency software	34	22	137

Base: all using each digital technology

DIGITAL SKILLS

Findings point to a continued digital skills gap at regional and national level. Only a quarter (23% and 26% respectively) said they were fully equipped to meet their business's digital technology needs, lower than the level recorded in 2014 (36% and 37%). This decrease may reflect the changing nature of digital needs between 2014 and 2017, with advances in digital technology creating demand for new types of skills that are not being fully met by most businesses. Indeed, a further quarter of businesses in the Highlands and Islands (24%) said they were not very well equipped and had considerable skills gaps (19% at Scotland level).

Of those identifying skills gaps, over a third (35%) related to technical requirements such as software and web development and 13% related more to business and commercial skills. Again, this reflected the pattern emerging for Scotland overall.

In spite of most businesses identifying at least some digital skills gaps, only 29% were taking any action to develop their employees' digital technology skills. Appetite for addressing digital skills gaps was, however, higher than it was in 2014: up from 42% to 48% in the Highlands and Islands, and from 44% to 53% in Scotland.

DIGITAL ECONOMY MATURITY INDEX

Analysis of findings from the Digital Economy Maturity Index (DEMI) illustrate that for both the Highlands and Islands and Scotland, there has been slight progression in digital maturity. The mean digital maturity score rose from 32.1 to 34.1 for the Highlands and Islands (out of a maximum score of 100). For Scotland, it rose from 33.5 to 35.9.

While most Highlands and Islands businesses remain within the lower half of DEMI (82%) (Figure 2), this has fallen from 86% in 2014. For Scotland, the comparable figure fell from 82% to 76%. The proportion of businesses in the top half of DEMI rose from 14% to 18%. At Scotland level, the proportion rose from 18% to 24%.

The more digitally mature businesses in the Highlands and Islands tend to be larger, operating for less than five years, and with expectations of growth in the next 12 months. They are more likely than average to work in tourism, have more than one establishment within the organisation, and to have a high turnover (of £1 million or more). They are less likely than average to be located in a fragile area.

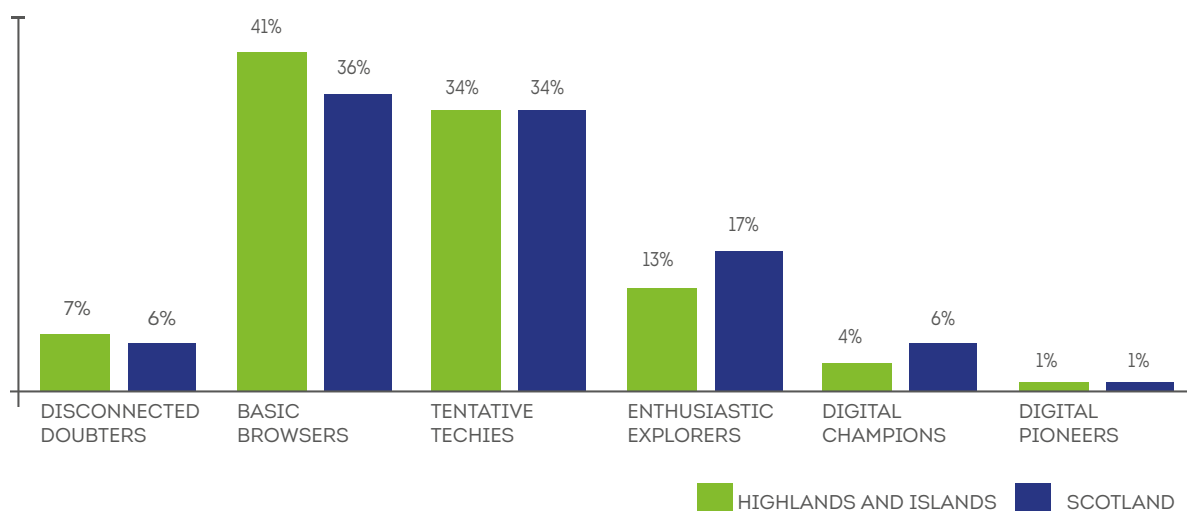
Conversely, the less mature businesses tend to be smaller, established for at least 10 years, and with expectations to continue to perform at the same level in the next 12 months. They are more likely than average to work in food and drink and have only one establishment in the organisation.

For the least digitally mature, findings suggest a lack of interest in digital technologies and lack of appetite for growing digital engagement in the future. Disconnected Doubters have low use of digital technologies, and are least likely to view them as important. This is reflected in the absence of plans or strategies for future use of technology. It could be argued that Disconnected Doubters are unlikely to benefit from efforts to increase their digitisation. However, there may be opportunities to encourage greater cyber security among the two least mature groups, Disconnected Doubters and Basic Browsers. Businesses in these segments are the least equipped for cyber security threats and least likely to have any controls in place to deal with such issues.

Businesses in the middle range of the index may benefit from future skills development. For example, while most Tentative Techies and Enthusiastic Explorers consider digital technology as important to their business, a significant proportion of these businesses identify digital skills gaps in their organisations.

By nature of being the most mature Digital Champions and Digital Pioneers represent those businesses with arguably less need for further digital development. However, there is still potential to increase certain aspects of digitisation among some of these businesses, such as more widespread superfast internet connection, and more uptake of lesser-used digital technologies such as data analytics, cloud computing, and online collaborative platforms.

Figure 2: DEMI profile of businesses



Base: All businesses: Highlands and Islands (1,209), Scotland (3,258)



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