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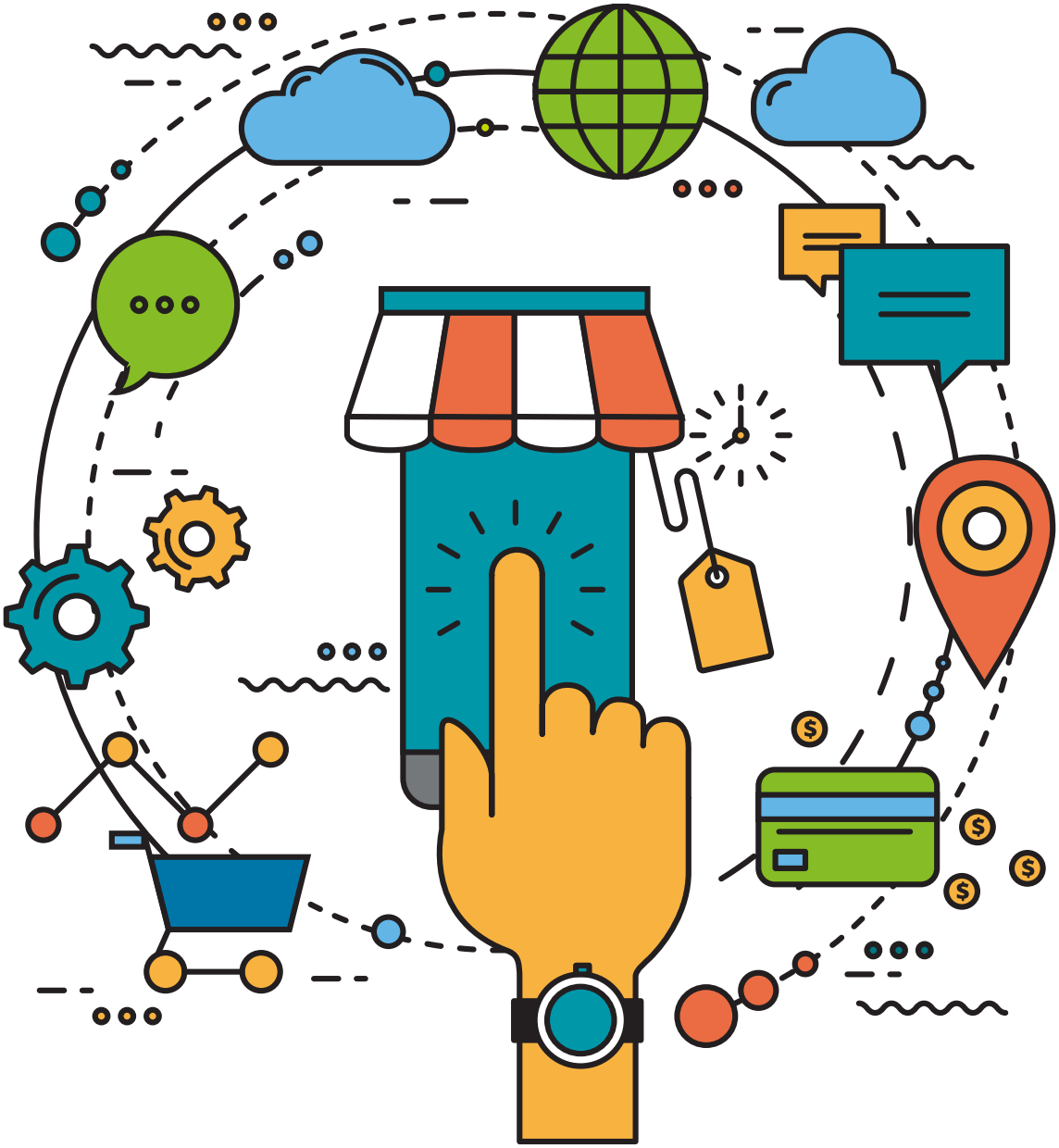

Connected Small Businesses US

Commissioned by Google

2017

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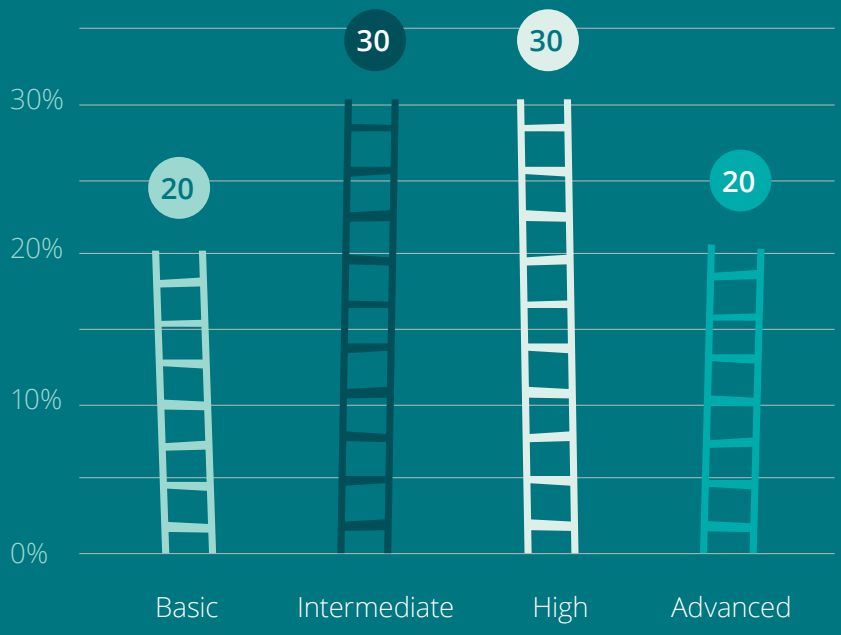


Small businesses with higher digital engagement also:

- Were more likely to **innovate** through new product offerings
- Had a more **diversified** national and international customer base
- Experienced increased inquiries and customers across the **sales funnel**

Highlights

Small and medium sized businesses (SMBs) are significant drivers of economic growth, job creation and new innovation in the United States (US).

There are around 29 million businesses with fewer than 500 employees in the US, representing 99.7% of all US businesses and almost half of total private sector employment. Growing SMBs can therefore lead to broader benefits for workers, consumers, and businesses of all sizes and industries throughout the US economy.

Digital tools create significant opportunities for SMBs to grow and innovate in a dynamic and competitive business environment. Technology enables businesses to increase connectivity and engagement with their customers, and can provide SMBs with a better understanding of their customer base. The use of digital tools can help SMBs to improve their performance and respond to changes in the business and consumer landscape in an agile manner.

This report provides insights into the use of digital technology amongst the US small business community, by focusing on businesses with fewer than 250 employees. Our research has two purposes: first, to provide an accurate picture of how small businesses use digital tools and identify how these businesses are positioned to take up different types of digital opportunities.

And second, this research aims to robustly quantify the impact of digital tools on US small business performance, explaining how small businesses can use digital channels to expand and grow.

Based on a survey of over 2,000 small business owners and managers in the US, we find that the level of sophistication in using digital tools varies across these businesses. In order to quantify the benefits realized by the most digitally advanced US small businesses, we create a digital engagement ladder that classifies each business into one of 4 digital engagement levels, based on their use of digital tools across 6 different categories. Multiple correspondence analysis is used to statistically identify the tools that are used by more digitally engaged small businesses, such as having mobile web or app capabilities for customer engagement, and using data analytics on website trends to inform business strategy.

These 4 digital engagement levels have been created based on how US small businesses use digital tools, and capture the range of digital activity across the spectrum of the small business community:

- At the **Basic** level a business has a relatively undeveloped digital presence, using only basic tools such as an email address, with no website or social media presence (20% of surveyed small businesses)
- The next **Intermediate** level includes businesses with digital tools such as a simple website that make use of basic online marketing tools, online directories or third party marketplaces (30% of surveyed small businesses)
- At the next **High** level, a business will have tools like a more advanced website, such as one with mobile or e-commerce capabilities, and is engaged with multiple social media and online marketing channels (30% of surveyed small businesses)
- Finally, at the **Advanced** level, businesses also utilize more sophisticated digital tools such as data analytics and mobile apps (20% of surveyed small businesses).

Our research finds that there are growth and employment dividends associated with higher levels of digital engagement for US small businesses at all business ages, and across all industries and geographies. In particular, small businesses were found to experience an increase in revenue growth of 11 percentage points per additional engagement level reached. We find that compared to the 20% of small businesses with the most basic level of digital engagement, the top 20% most digitally advanced US small businesses:

- Earned **2 times** as much revenue per employee
- Experienced revenue growth over the previous year that was nearly **4 times** as high
- Were almost **3 times** as likely to be creating jobs over the previous year;
- Had an average employment growth rate that was more than **6 times** as high and
- Were also **3 times** as likely to have exported over the previous year.

This report seeks to explore the channels through which digital engagement drives greater revenue and jobs growth, acknowledging that small businesses with higher growth also have greater capabilities to invest in using digital tools. Our analysis finds that businesses with increased digital engagement also have higher levels of exports, customer diversification, innovation and inquiries across the sales funnel. These benefits illustrate how small businesses are able to use technology to create opportunities to grow through new markets and products.

The significant digital dividends to be gained by US businesses are also echoed in the case studies presented in our research, with small business owners declaring that the use of digital tools have allowed their business to reach new international markets, and that an expanding online presence will be critical to future growth.

This report is the first of two reports that aim to provide new insights into digital use amongst the US small business community. The second report, due for release in the second half of 2017, will delve deeper into the how and why of digital engagement, in particular by examining the barriers that small businesses face in using new digital tools and what steps businesses can take to succeed in an increasingly digital world.

Overall, our research finds that US small businesses can reap significant benefits from using digital tools. With small businesses representing a key source of economic growth, job creation and new innovation in the US, it will be important that these businesses continue to seek opportunities to adopt new and more sophisticated digital tools, and be strategic in adapting these technologies to grow their business in the future.

SMBs make a significant contribution to the US economy

Small and medium sized businesses (SMBs) are widely considered the backbone of the US economy. While there are several different definitions of SMBs, the Small Business Administration (SBA) defines them as businesses that have fewer than 500 employees. Under this definition, the SBA has stated that there are 28.8 million SMBs in the US, representing 99.7% of all US businesses (SBA 2016). These small and medium sized businesses are therefore a significant part of the overall business ecosystem, and increasing SMB activity has benefits throughout the national economy across all measures of performance and success – including growth, employment, innovation and living standards.

SMBs are already significant contributors to the US economy, particularly in the context of job creation. Since 1990, SMBs have added 8 million jobs in the US, where by comparison large businesses have eliminated 4 million jobs over the same period (SBA 2017).

This is consistent with the longer term trend – since the 1970s, small businesses have created two-thirds of all net new jobs in the US economy (SBA 2017). In 2013, around 5.8 million SMBs were employing businesses, and in total US small and medium sized businesses employed 56.8 million people, or 48% of the private workforce. Firms with fewer than 100 employees have a particularly large share of employment, representing around one-third of total private sector employment (Chart 1).

US SMBs also generate a significant share of the economy's overall exports. According to the SBA, 97.7% of all companies that exported goods from the United States in 2013 were SMBs, and they exported around one-third of the US's total exports by value (SBA 2016). The National Small Business Association's Small Business Exporting Survey 2016 reported that 58% of small business respondents had exported goods and/or services to customers outside of the United States (NSBA 2016).

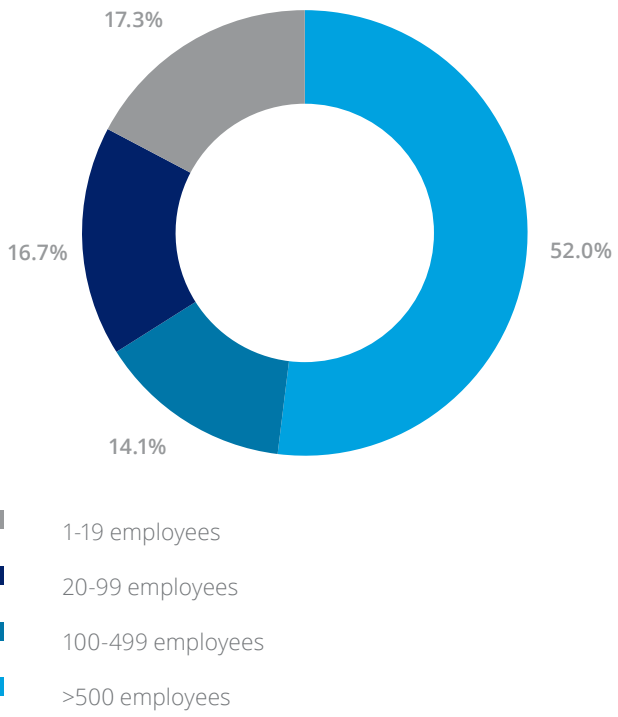
The economic landscape facing SMBs in the US is dynamic and has been constantly evolving over recent years. Current levels of optimism amongst SMB owners are relatively high (NFIB 2017), but SMBs also continue to face a variety of challenges, with small business owners identifying hiring new employees and increasing profits as the top two issues and challenges in front of them in 2016 (Johansson 2016).

As digital services and tools mature, so too are the benefits associated with adopting new digital technologies increasing for SMBs. There have been increases in the quality of available and relevant digital tools across many core business functions, including marketing, finances and customer relations. Digital tools such as cloud services, social media and online payment platforms can provide SMBs with the ability to efficiently scale up their operations and expand their reach into new markets. They can remove obstacles for SMB growth and also provide significant opportunities for SMBs to create new and innovative products and services.

In particular, digital tools enable SMBs to be more competitive, with a recent study finding that around half of small business decision makers believe that technology helps to level the playing field for small businesses versus larger corporations (Sharma 2016). The research also found that 40% of respondents cited their relatively smaller size as a competitive advantage over large companies, enabling them to be more agile and responsive in taking advantage of digital innovation in a timely fashion. This suggests that many SMBs in the US are already recognizing the benefits that using digital tools can have for business growth and innovation.

Looking to the future, The Economist (2016) has ranked the US as having the "third most attractive business environment globally" for the 2017-21 period. It is critical that US SMBs take advantage of the opportunities presented while also working towards addressing any potential challenges that lie ahead.

Chart 1: Share of US private sector employment by firm size, 2013



Source: SBA (2016)

Given the increasing prominence of digital tools and technologies across the US business and consumer landscape, improving the digital engagement of SMBs can be an important driver of future growth – both for SMBs themselves as well as across the entire economy, with SMBs representing important employers of workers, creators of new products, and customers of larger corporations in the US.

This report will explore how more digitally engaged small businesses can support economic activity, job creation and innovation across the US economy. Its key findings relate to the use of digital technology by the small business community in particular, with the analysis focusing on US businesses with fewer than 250 employees.

A diverse range of digital tools can have benefits for US small businesses

There are a range of digital tools that can be used by small businesses in order to increase accessibility, information availability and connectivity with their customers. In an increasingly digitized world, consumers are increasingly expecting to be able to engage with businesses through online channels, whether this engagement relates to initial inquiries, browsing through available products, direct bookings and purchases, or providing customer feedback. This is particularly the case for small businesses, who may not have the size or reach to engage with new or existing customers without a digital presence.

This report examines a variety of different digital tools that are used by small businesses in the US, including:

- Business **web presence,** such as being listed in online directories, having a website that may or may not be mobile responsive, and existence of mobile app
- Use of **social media** for commercial purposes, such as customer engagement, sales and marketing
- **Data analytics** used to examine characteristics of customers, to inform business decisions such as online marketing strategies or products offered
- Ability for customers to make **bookings and purchases** through online channels, such as enabling payments through the business' website or use of third-party e-commerce platforms
- Use of various types of **online advertising**, from ad banners on websites or social media, to search engine marketing and optimization strategies and
- Digital technologies and tools utilized **internally** in order to improve business processes or worker productivity (e.g. cloud-based software, video conferencing, corporate social networks).

The rapidly evolving nature of the digital landscape as new technologies are developed and utilized provides businesses with many new opportunities to drive growth and innovation. It is therefore essential that US small businesses are continuously seeking to improve their use of digital tools and technologies as part of their core business functions and interactions with customers. In this context, our analysis seeks to capture a diverse range of digital tools that may be used by small businesses in order to achieve growth.

In order to assess how the use of these various digital tools translates to improved business performance across small businesses in the US, Deloitte Access Economics[1] has conducted a survey of more than 2,000 US small business owners and managers,[2] collecting responses on their businesses' use of digital technologies and performance on key metrics such as revenue growth, job creation, exports, innovation and customer numbers. We have applied multiple correspondence analysis to the data collected from this survey to construct a 'digital engagement ladder', classifying each small business into one of 4 levels of digital engagement based on the extent and sophistication of their use of the 6 categories of digital tools listed above.

Our analysis recognizes that different digital tools may or may not be relevant for individual businesses, and as such small businesses were not required to be using every digital tool specified for a particular engagement level in order to be classified there.

Rather, businesses that met a given threshold of overall digital engagement based on their use of these different tools were deemed to be operating at that level of digital engagement.

The diverse range of digital tools available to businesses means that there are small businesses operating at varying levels of digital engagement across the US economy. What does it mean for a business to be classified within each of the 4 levels on the digital engagement ladder? By examining the survey responses associated with businesses' use of different digital tools, we have summarized a set of high-level representative characteristics for US small businesses at each level of digital engagement. These digital engagement classifications are outlined in Figure 1 and encompass varying degrees of sophistication in how small businesses use the broad range of digital tools canvassed in our analysis.

Figure 1: Representative characteristics of US small businesses at each level of digital engagement

Basic	Intermediate	High	Advanced
• Business only has a business email address • Marketing activity focused on traditional advertising methods (e.g. post) • No business website or social media presence • Unlikely to use digital tools for internal purposes.	• Business with a simple website with no e-commerce or booking capabilities • May be listed on online directories or third party marketplace platforms • Limited social media presence • Makes use of basic online marketing tools (e.g. email advertising)	• Business has an advanced website, e.g. one that is mobile-responsive or has e-commerce capabilities • Engaged through multiple different social media channels • Greater use of online marketing methods (e.g. webpage ad banners, social media advertising) • Utilizes digital tools internally, such as video conferencing or cloud software	• Business uses date from its website to analyze customer trends and inform business decisions • More likely to have a mobile app to enable customer engagement • Uses sophisticated online marketing tools such as search engine strategies and video advertising

Source: Deloitte Access Economics (2017)

1. Deloitte Access Economics is Australia's pre-eminent economics advisory practice and a member of Deloitte's global economics group. The research for this report was prepared by the Deloitte Access Economics team.

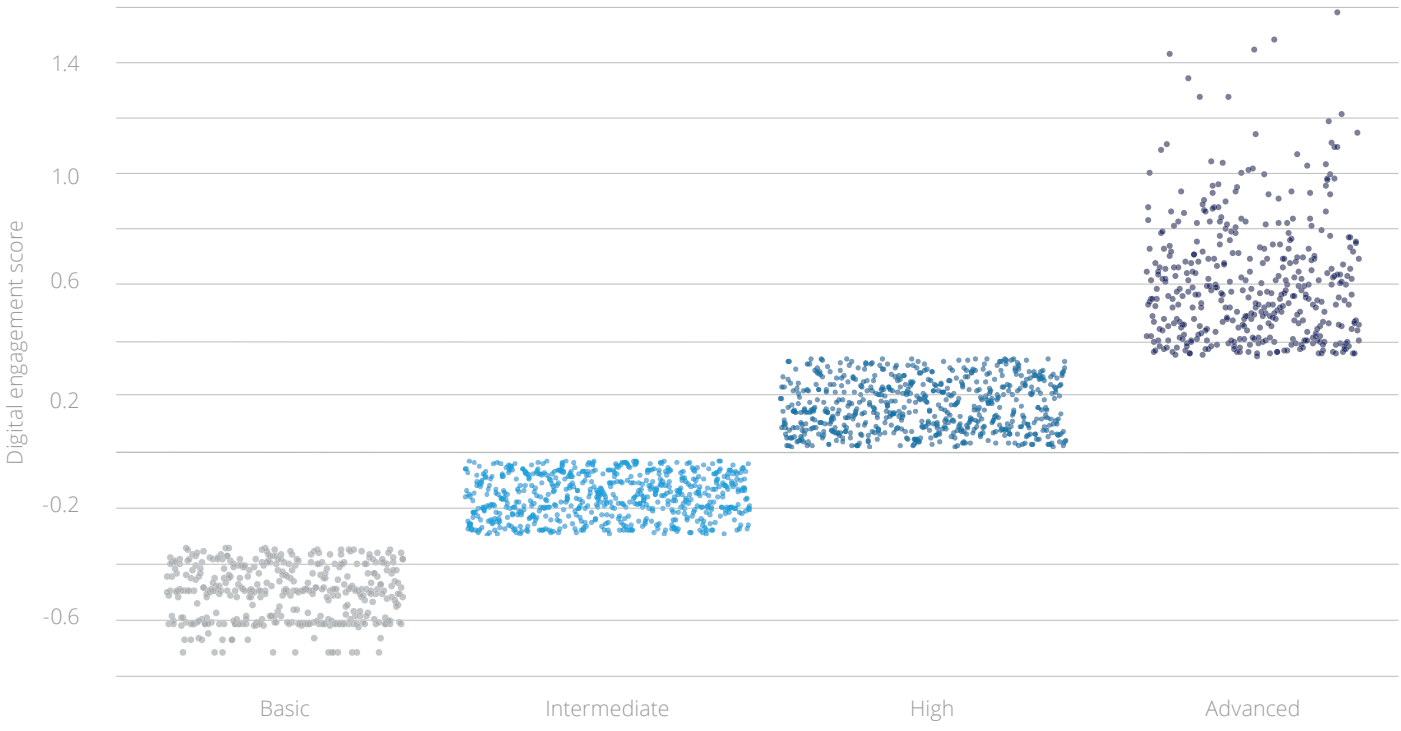
2. Our sample of small businesses includes US businesses with up to 250 employees, in order to focus the research on the small business community.

The survey results and statistical analysis indicate that:

- **Basic** businesses represented 20% of the sample. More than 90% of small businesses in the basic category did not have a website, and 85% had no social media presence. Almost none engaged in online forms of marketing such as ad banners on websites or search-related advertising.
- Businesses with **intermediate** levels of digital engagement represented 30% of the sample. 70% of businesses in the intermediate category had a website, but only 10% of intermediate small businesses had a mobile-responsive website. 51% of small businesses in this category had some presence on social media.
- Businesses that had **high** digital engagement represented 30% of the sample. In the high category, 58% of businesses had online booking or e-commerce capabilities and 70% utilized digital tools for internal purposes. 83% of small businesses in this category engage in online marketing strategies.
- **Advanced** businesses represented 20% of the small business sample. Within the advanced category, 81% of small businesses collect data about visitors to their website, with the majority of these using this data to analyze customer trends and inform business decision making. 27% of advanced businesses have a mobile app, which is significantly higher than the average of 3% across the other levels of digital engagement.

Chart 2 illustrates the dispersion of digital engagement for the 2,013 US small businesses surveyed, both across and within the different levels of the digital engagement ladder. Further details on the statistical methodology used to allocate small businesses to different digital engagement levels provided in the Appendix.

Chart 2: Distribution of US small businesses across the digital engagement ladder



Sources: Deloitte Access Economics, Research Now (2017)

Revenue growth is a key benefit of small business digital engagement

Implementing advanced digital strategies can provide small businesses with the tools to gain a competitive advantage over other businesses and therefore drive sustained increases in revenue growth. Consistent with this, our analysis finds that small businesses that are higher on the digital engagement ladder have greater growth potential, being more likely to have experienced growth in revenue over the past 12 months, as well as having increased likelihood of expecting growth in the future.

Overall, our survey results suggest that more digitally engaged small businesses are able to generate significantly more revenue per employee, with digitally advanced small businesses earning average revenue per employee of $504,396, around 2 times as high as those with only basic digital engagement ($251,592 per employee).

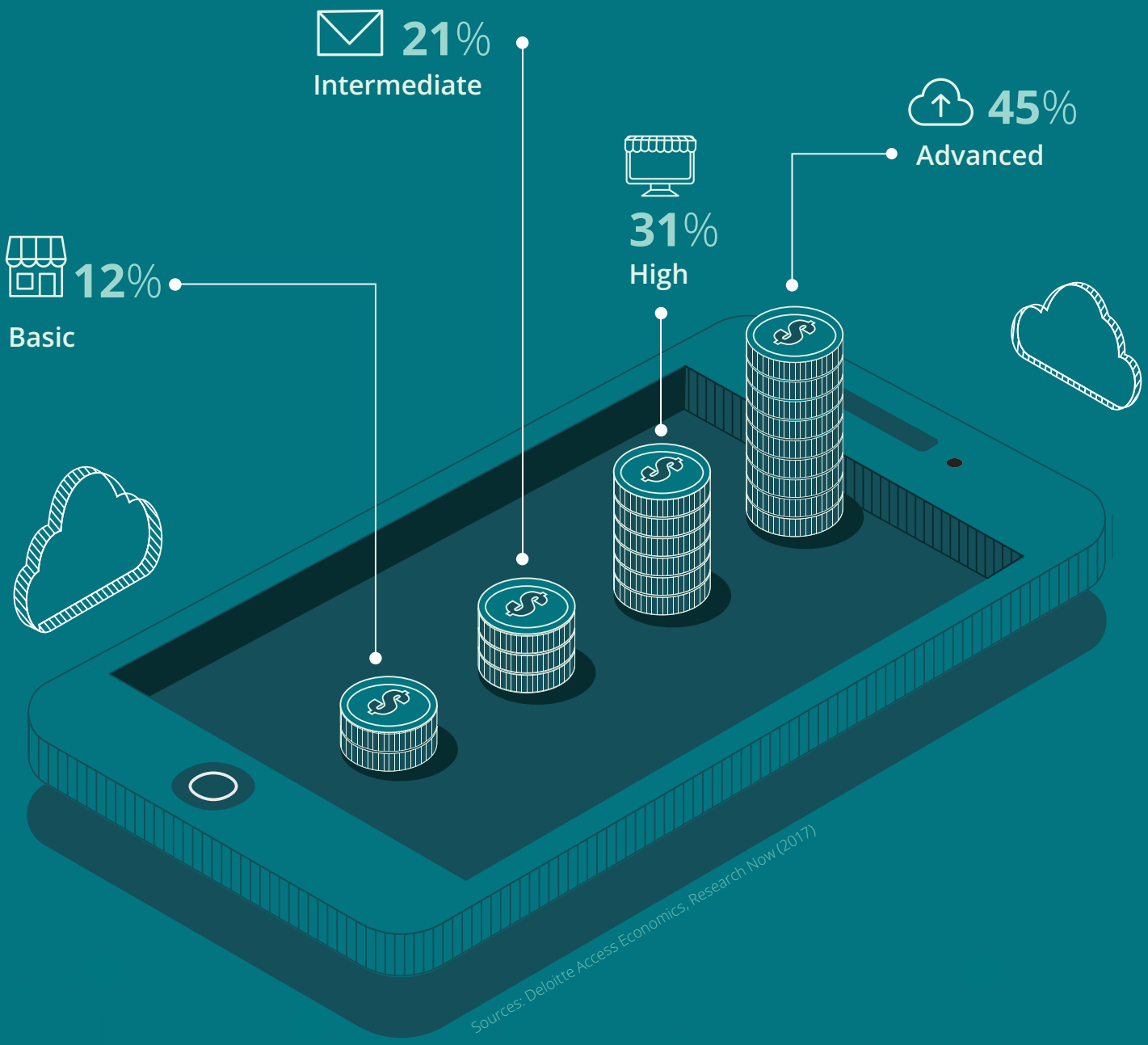
Deloitte has also performed multivariate regression analysis using the survey data to determine how much extra revenue growth can be achieved by small businesses as they move up the digital engagement ladder. Our analysis controlled for other business characteristics such as industry, location and years in operation, in order to isolate the benefits associated with increased digital engagement.

More specifically, a business can be more sophisticated in its use of digital tools by, for example, introducing mobile web capabilities, employing more advanced types of online marketing, or using data analytics to evaluate customer trends. A small business that is relatively more sophisticated in its use of digital tools will be defined as being higher up on the digital engagement ladder (represented in Figure 1) compared to one that uses little or no digital tools. The multivariate regression analysis seeks to determine the extent to which being higher on the digital engagement ladder impacts a business' revenue growth, after controlling for other business features that may also affect revenue growth (such as industry, location and age). Further details about the statistical analysis can be found in the Appendix.

The econometric modeling finds that small businesses with an advanced level of digital engagement had an average revenue growth rate that was nearly 4 times as high as the growth experienced by those with basic digital engagement, at 45% over the previous 12 months (compared to 12%). The regression results from surveyed businesses indicate that there are benefits associated with each step up the digital engagement ladder, with an average increase in revenue growth of 11 percentage points per additional engagement level (Chart 3).

Chart 3

Revenue growth over the past 12 months



Sources: Deloitte Access Economics, Research Now (2017)

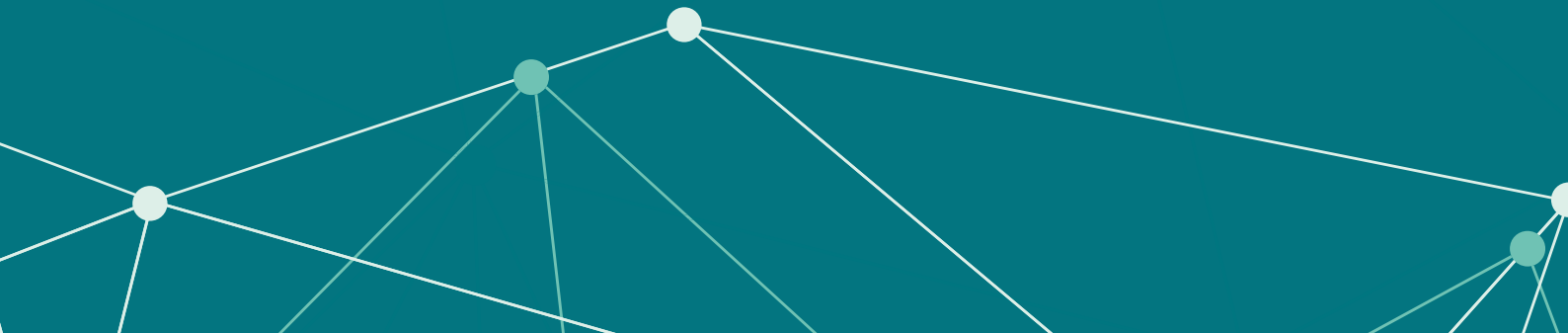
The causal relationship between digital engagement and revenue growth

It should be noted that the causality underlying this positive association between digital engagement and revenue growth could potentially go in both directions. That is, while one explanation for this result is that more advanced use of digital tools leads to higher revenue growth, another possible explanation is that small businesses that are experiencing higher growth could be more likely to have the resources or time available to invest in increased uptake of digital tools.

While both of these are possible statistical interpretations of the results presented in Chart 3, the analysis we present throughout this report (both through our modeling and case studies) provides insights into the channels through which higher digital engagement can facilitate higher revenue growth. In particular, more digitally engaged small businesses:

- Are able to reach a more diversified customer base, including a wider range of export markets, which means they can grow faster than small businesses with a more limited pool of potential customers
- Have greater capabilities for product innovation, which enables these small businesses to generate new streams of revenue by offering new products and services to the market and
- Experience more customer activity throughout the sales funnel, from initial interest, to purchase inquiries, to actual customers.

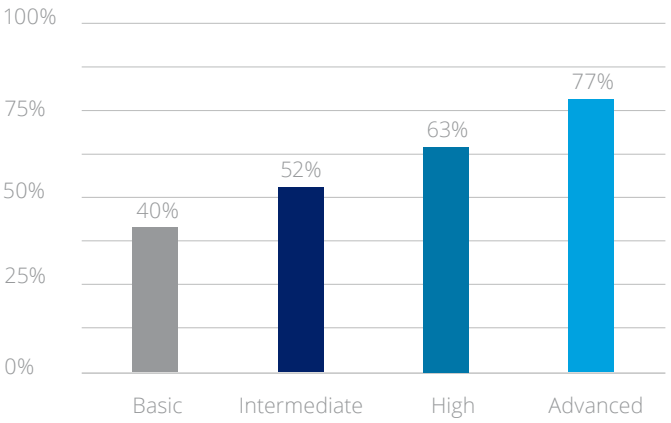
While there will be some effects associated with increased growth leading to more investment in digital tools, our research suggests that overall, the primary causal direction of the relationship is that small businesses are indeed reaping significant growth dividends as a result of increased use of digital tools. The benefits to these other business performance indicators – highlighted in the following sections of this report – represent the channels through which digital engagement can generate higher growth, and they illustrate how small businesses are able to use technology to create opportunities to grow through new markets, products and customers.



With digital tools such as data analytics, mobile apps and video advertising becoming increasingly integrated into the business and consumer landscape across various industries throughout the economy, more digitally engaged small businesses are also more likely to expect to experience revenue growth in the future. In particular, our results show that small businesses with advanced levels of digital engagement are almost twice as likely to be expecting revenue growth over the next 12 months compared to businesses with basic engagement (Chart 4).

Our research concludes that there is a significant digital dividend for small businesses, and that engaging with digital technologies is associated with increased revenue growth across the spectrum of small businesses in the US. With small businesses making up a substantial proportion of economic activity in the US, increasing the digital engagement levels of these businesses can be a significant contributor to the nation's future economic prosperity.

Chart 4: Likelihood of expecting revenue growth in the next 12 months



Sources: Deloitte Access Economics, Research Now (2017)

Case study

Kaleidoscope Hair Products

New Orleans, Louisiana

Kaleidoscope Hair Products is a relatively new small business in New Orleans, Louisiana that sells hair care products which restore hair follicles and work to rejuvenate hair growth. Jesseca Dupart, Owner and CEO of Kaleidoscope Hair Products, attributes the business' significant growth since their launch in 2014 to the use of digital tools: "We went from selling no products to having a full warehouse, exponential growth, and distributors all around the world."

The business uses a range of digital tools in order to reach customers across the US and internationally. Kaleidoscope's website has e-commerce capabilities which allow customers to make direct purchases online, and the business leverages digital marketing strategies – including search engines, social media and video streaming sites – in order to connect with a range of audiences and reach both new and existing markets. The effectiveness of these digital tools and the quality of customers' online experiences are analyzed on an ongoing basis using web analytics to ensure that Kaleidoscope can maximize their return on investment in this digital engagement.

In 2016, Kaleidoscope reached over 43,000 customers and doubled their revenue from the previous year. Around 90% of the business' current marketing budget is dedicated to digital channels, and Jesseca believes that these digital tools have been a key driver of this rapid growth. "With e-commerce, there's no limit," Jesseca says. The internet and digital tools enable her to reach many more people around the world – "it's opened so many doors," she adds.

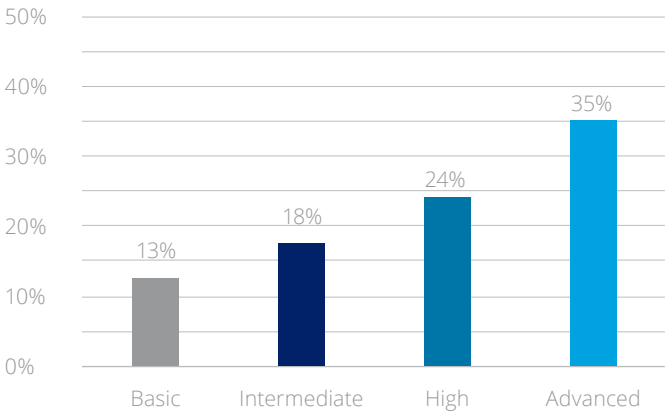
Digitally engaged small businesses create more jobs

Increasing the use of digital tools amongst small businesses may be an effective way to increase employment throughout the US economy.

Small businesses already employ a significant number of US workers, representing almost half of the private workforce. Our analysis suggests that small businesses that are more digitally engaged are also more likely to have created new jobs and experienced employment growth over the past 12 months. With increased digital engagement also being associated with higher revenue growth as previously discussed, this result is consistent with previous economic research which has found that high-growth businesses account for a significant proportion of total job creation in the US (Decker et al. 2014).

A digitally advanced small business had a 35% likelihood of having seen employment grow at their business in the previous 12 months, which was almost 3 times as likely as small businesses with only a basic level of digital engagement (Chart 5).

Chart 5: Likelihood of employment growth over the next 12 months



Sources: Deloitte Access Economics, Research Now (2017)

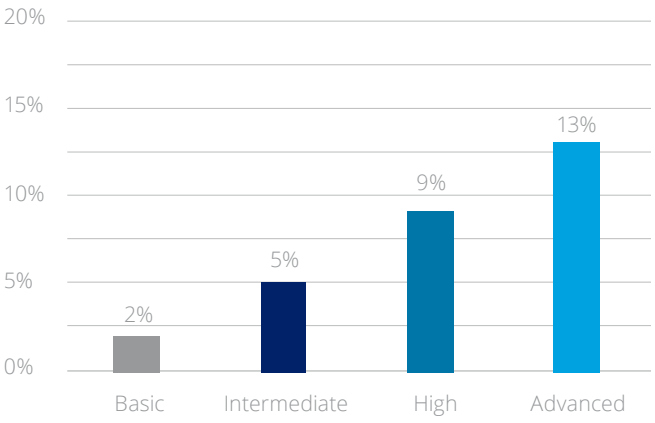
This job creation is likely to be associated with the increased growth opportunities that are generated by businesses with higher levels of digital engagement, with these businesses potentially required to employ more workers to facilitate this growth.

Deloitte also used the survey results to analyze the magnitude of the employment changes experienced by small businesses over the past 12 months, in order to determine the size of the relationship between job creation and digital engagement, and assess how this varies for more digitally engaged businesses.

Our analysis finds that the average digitally advanced business experienced employment growth of 13%, which was more than 6 times as high as the 2% employment growth rate observed for small businesses with basic digital engagement (Chart 6). Job creation benefits are realized with every step up the digital engagement ladder, with small businesses at intermediate and high levels of digital engagement respectively experiencing double and 5 times the employment growth rate of basic businesses. In addition, as highlighted previously, employees at more digitally-engaged small businesses tend to be relatively more productive, with the average revenue per employee at digitally advanced businesses being 2 times as high as at small businesses with a basic level of digital engagement.

These results suggest that the value associated with increased digital engagement amongst US small businesses goes beyond simply generating greater revenue and cash flow for these businesses. Small businesses that invest in the use of new technologies and existing digital tools also have the potential to create jobs and experience employment growth, enabling the benefits of digital engagement to be spread across the US workforce and throughout the economy.

Chart 6: Employment growth over the past 12 months



Sources: Deloitte Access Economics, Research Now (2017)

Case study

Dreamstyle Remodeling
Albuquerque, New Mexico

Dreamstyle Remodeling offers home improvement and custom home remodeling services, including for kitchens, bathrooms and outdoor living spaces. Since the business was established in 1989, it has grown from their original operations in Albuquerque, New Mexico to multiple locations across Western USA, with a customer base that has primarily been comprised of baby boomers. Digital tools have recently enabled the company to market their services to new customers, by connecting with a younger generation of homeowners entering the remodeling market.

Since 2013, Dreamstyle has adopted more sophisticated marketing strategies centered around digital tools, which have enabled the company to accelerate their growth. This includes advanced online advertising, such as using listings on online directories to provide customers with a 360-degree virtual tour of their showrooms; data analytics in order to determine which advertising campaigns are most effective; and social media channels to connect with both new and existing customers.

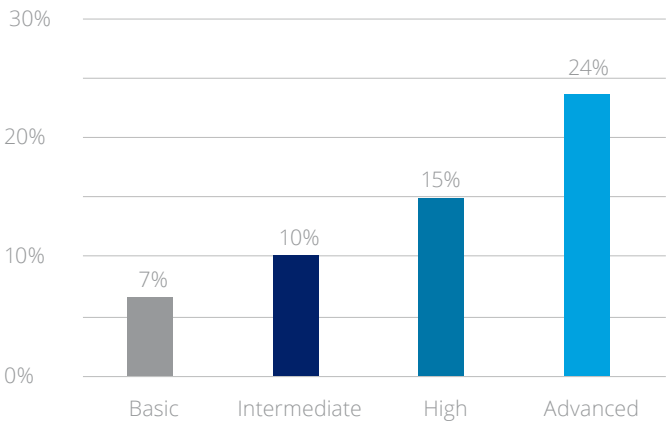
The business is growing 34 percent annually and expects to reach $100 million in sales this year. Founder and CEO of Dreamstyle, Larry Chavez, states that “the success of Dreamstyle's digital branding is not only good for selling products, it's good for recruiting people.” For a growing business in a service industry, that "is our top priority," he adds. Since engaging in their digital strategy, Dreamstyle has added 250 employees to keep pace with their growth and plans on hiring another 500 people to support their expansion in two additional locations by 2020. According to Larry, digital tools and their expanding online presence “are going to be critical to that growth".

Digital tools help small businesses export and diversify their customer base

A key benefit associated with the use of digital tools by small businesses is the increased business reach and market presence that can be attained. For example, utilizing the internet to undertake core business functions such as online marketing, customer engagement through social media, and enabling payments through a website with e-commerce capabilities can open up new markets for small businesses that had previously not been accessible. This includes expanding into new geographic locations, demographics, other market segments across a wider audience.

Digital tools are particularly useful for facilitating new export opportunities for small businesses that are seeking to market and sell their products or services overseas. Online communication channels have enabled US businesses to connect with customers in Asia, Europe and across the world in a fast and inexpensive manner, meaning that new markets and growth opportunities are available for small businesses who utilize these digital tools. The rise of digital marketing tools – which can access wider audiences while also being relatively affordable, flexible and scalable – have provided small businesses with additional routes to reach international customers, as well as enabling increased competition between larger businesses in the market.

Chart 7: Likelihood of exporting over the past 12 months



Sources: Deloitte Access Economics, Research Now (2017)

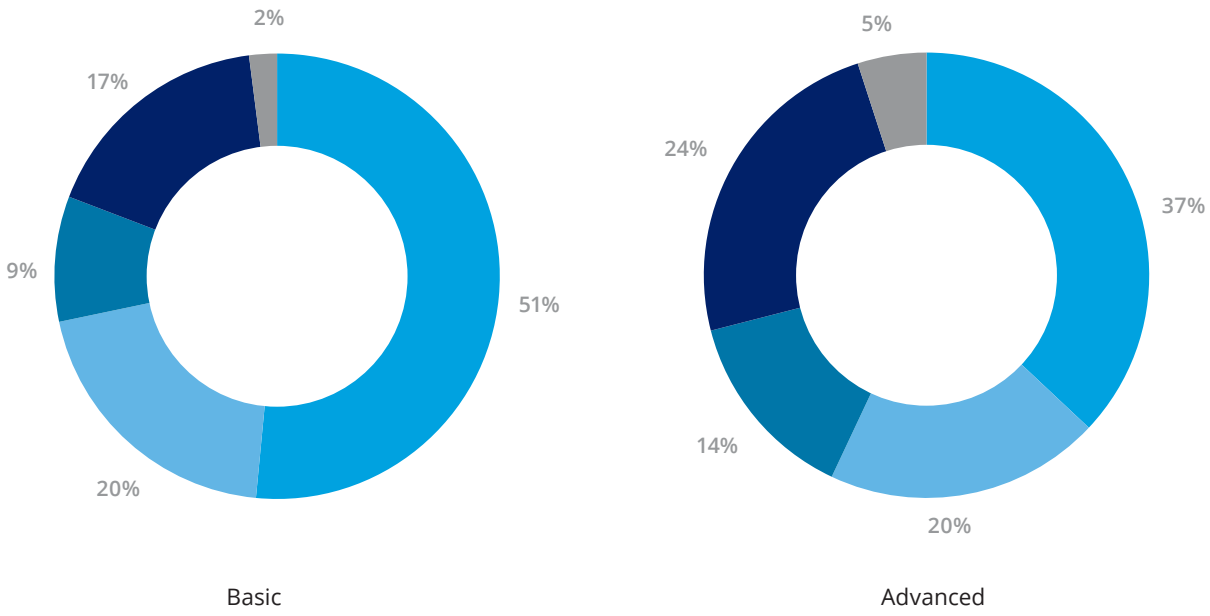
Research shows that the fastest-growing export segment in the US are businesses with fewer than 50 employees, which is partly attributable to the growth of these digital platforms (McKinsey 2016). As has been previously discussed, SMBs already account for a substantial proportion of US exports, representing 97.7% of all companies that exported goods from the United States in 2013 and one-third of the US's total exports by value (SBA 2016). The increased uptake of digital tools by small businesses could help to further boost trade flows across the economy.

Econometric modeling using our survey results shows that more digitally engaged small businesses are more likely to have exported over the past 12 months. In particular, the average small business with an advanced level of digital engagement had a 24% likelihood of having exported over this period, which was significantly higher than the 7% likelihood that was found for small businesses at the basic level (Chart 7). The likelihood of exporting to overseas markets also increases for each step up the digital engagement ladder, and this increased ability to export represents a key channel through which small businesses that are more digitally engaged can achieve the higher revenue growth that was highlighted earlier in this report.

The ability for digital tools to enable small businesses to reach new customers also extends to those businesses who would prefer to maintain their sales and operations within the US. The volatility of business revenue can be much higher for small businesses as compared to larger businesses, given the competitive environment they operate in and the additional cash flow challenges they can experience (Equifax 2013). In this context, a more diversified customer base can assist with minimizing risks associated uncertainties in individual market segments and revenue streams.

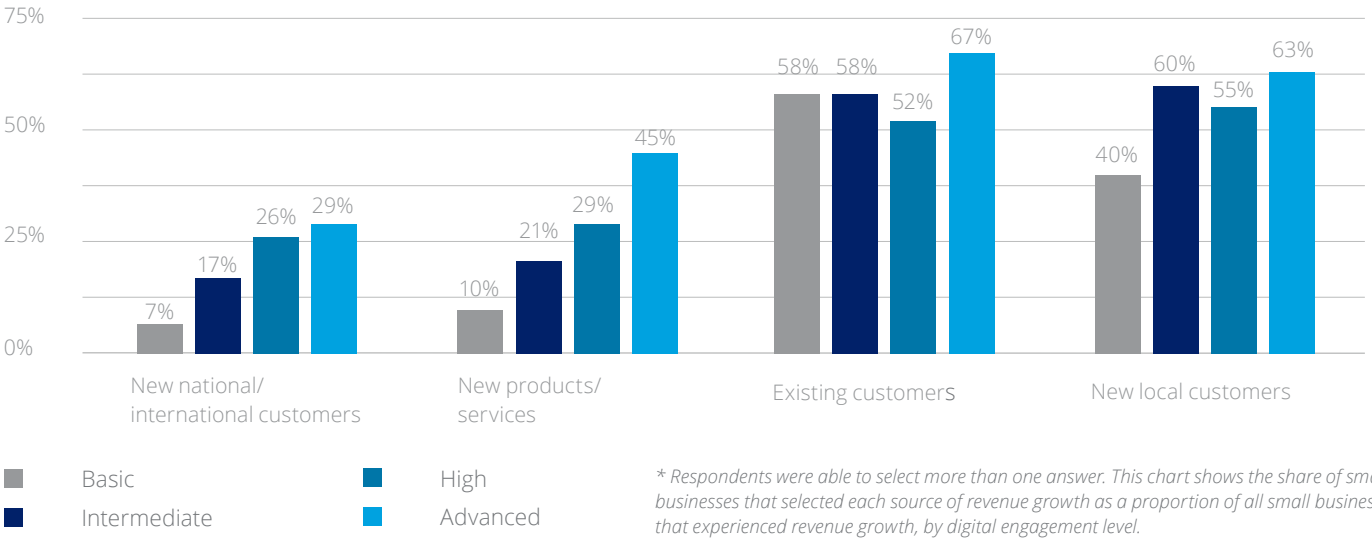
Our research finds that digital tools enable small businesses to reach a wider customer base, outside of those that are located directly within the neighborhood or city that the business itself is situated in. The survey results indicate that small businesses with a basic level of digital engagement predominantly sell to their local area, with more than half of their customers coming from within their business' local neighborhood, and only 28% from interstate or overseas customers (Chart 8). In contrast, digitally advanced small businesses are able to source 43% of their customer base from either interstate or overseas.

Chart 8: Distribution of customer base by location



Sources: Deloitte Access Economics, Research Now (2017)

Chart 9: Sources of revenue growth over the past 12 months



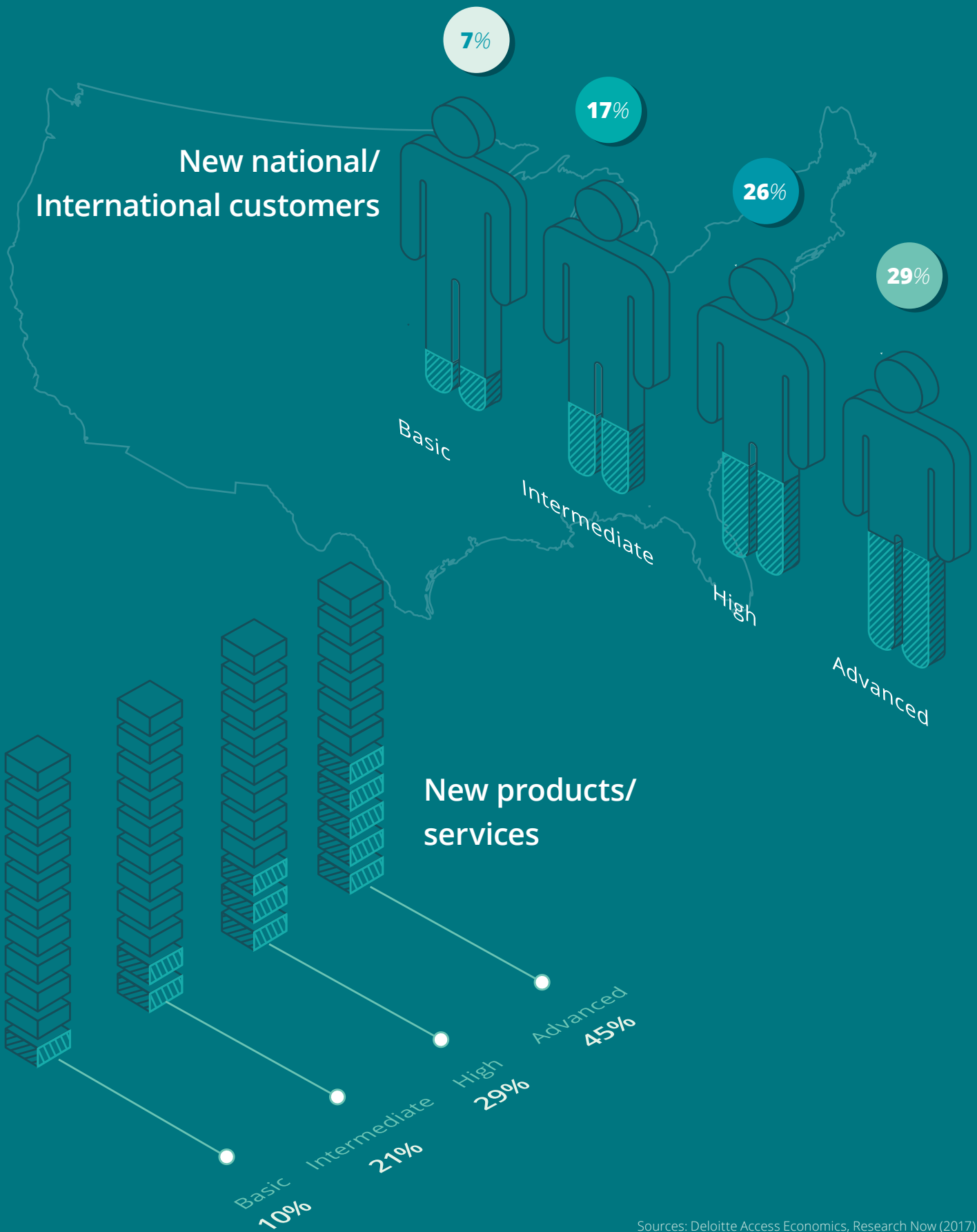
** Respondents were able to select more than one answer. This chart shows the share of small businesses that selected each source of revenue growth as a proportion of all small businesses that experienced revenue growth, by digital engagement level.*

Sources: Deloitte Access Economics, Research Now (2017)

Previous findings highlighted in this report suggest that small businesses with lower digital engagement generally experience relatively lower revenue growth than business that are more digitally engaged. It is possible that the more diversified customer base that highly digitally engaged businesses are able to reach is one contributing factor to this result. As digital tools enable small businesses to reach customers across a wider range of markets, businesses that make greater use of these technologies are likely to be growing faster than those with a more limited pool of potential customers.

An analysis of the sources of growth for small businesses who experienced increased revenue over the past 12 months shows that new national or international customers were more likely to be a source of revenue growth for more digitally engaged businesses. These customers represented a source of growth for 29% of small businesses with an advanced level of digital engagement, as compared to only 7% of businesses with basic digital engagement (Chart 9). Small businesses with greater digital engagement were also significantly more likely to experience growth due to innovation, with nearly half of advanced small businesses stating that new products or services represented a source of revenue growth over the past 12 months (discussed in more detail in the following section).

Sources of revenue growth over the past 12 months



Sources: Deloitte Access Economics, Research Now (2017)

Case study

Alpaca Direct

Hayden, North Idaho

Alpaca Direct is a small business that sells durable, eco-friendly yarn, socks and apparel manufactured using alpaca wool. While the alpacas are raised on a ranch where the business is based in Hayden, North Idaho, an online store and a multifaceted digital strategy enables the company to sell yarn, socks and other knitting products to customers and markets around the world.

The company relies on the internet to sell their products and build brand awareness. Co-owner of Alpaca Direct, Jim Hobart, recognizes that "our products are especially popular in cold-weather climates". Jim says that they use data analytics on customers' geolocation to "identify niche markets that are going to be interested in our products", and online advertising to "expand our presence into those markets". Given their significant international reach, Alpaca Direct also utilizes digital tools to internally coordinate their business operations and engage with customers, including cloud-based CRM, inventory and shipping software, online document management, and video conferencing for communications.

Using digital tools has provided Alpaca Direct with new opportunities to expand into international markets. The company has served over 100,000 customers in 30 countries to date, with 92 percent of their sales coming from the web. According to Co-owner Kelley Hobart, "There are a lot of people all over the world who don't have a local yarn shop". With digital tools connecting Alpaca Direct to customers all over the world, Kelley hopes that the business can "become their local yarn shop even though we're all the way here in Idaho".

Digital tools drive innovation through new product offerings

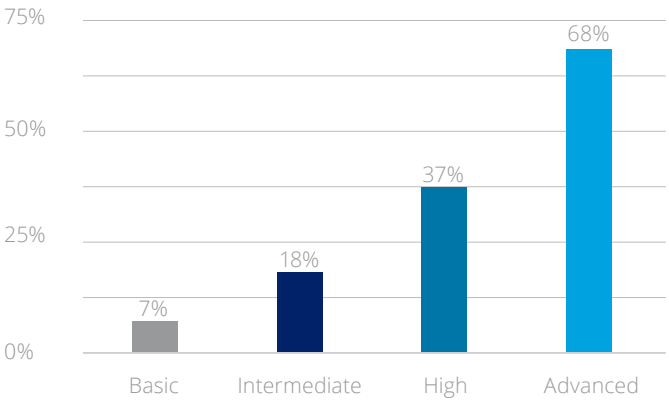
Innovation is an important driver of economic growth, as new ideas, products and processes keep businesses competitive and provide new opportunities to deliver prosperity in every sector of the US economy. SMBs are noted for their ability to introduce innovation: amongst high-patenting US firms, SMBs produced 16 times more patents per employee than large businesses (Deloitte Access Economics 2014). Previous economic studies have also suggested that small businesses play a particularly important role in conducting research and development into products and services that may be financially unprofitable but instead have broader welfare returns to society as a whole (Wallsten 2000).

There are many dimensions to innovative activity driven by small businesses in the US economy. At its core, innovation involves the discovery or invention of a new solution for something that consumers need, which can catalyze the creation of new products and services – or even entirely new enterprises (Kim 2014). This could include a business improving a product in a way that better tailors it to customers' demands, or introducing a new channel that enables customers in previously untapped markets to access its service offerings.

The use of digital tools can help to facilitate growth within a business through increased innovation. In this report, we measure innovation as the propensity for a business to create and offer new products and services to their customers, noting that there may be other dimensions to innovation. Developing these new products and services can provide greater opportunities for small businesses to grow in both existing and new markets, and therefore represents a key channel through which US small businesses can achieve the revenue growth and jobs creation that have been highlighted in previous sections of this report.

Our analysis of surveyed businesses reveals that digitally engaged small businesses were more likely to have offered a new product or service over the past 12 months. While the average small business with a basic level of digital engagement had only a 7% likelihood of having innovated in this period, this likelihood significantly increased as businesses moved up the digital engagement ladder. In comparison, highly digitally engaged small businesses were more than 5 times as likely to have introduced a new product or service, with this rising to nearly 10 times for small businesses at an advanced level of digital engagement (Chart 10).

Chart 10: Likelihood of offering new products or services over the past 12 months

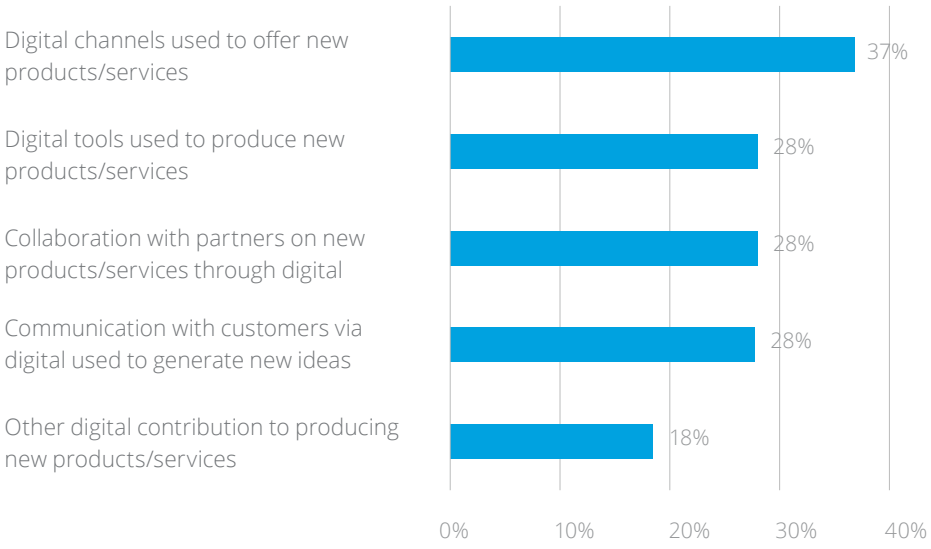


Sources: Deloitte Access Economics, Research Now (2017)

The survey results also provide further details on the different ways in which the use of digital tools can facilitate increased innovation amongst small businesses (Chart 11). Of the small businesses who had created a new product or service in the past 12 months, the most significant impact associated with the use of digital tools was in creating new channels to sell and market the businesses' new products (highlighted by 37% of respondents). Digital tools were also used by small businesses as a means to produce new products, and to enable collaboration and communication with partners and customers in order to generate new ideas.

Our research finds that greater use of digital tools enables US small businesses to innovate and offer new products and services to the market. These innovations can provide firms with the opportunities to generate new streams of revenue. Small businesses who invest in improving their digital engagement by increasing their use of digital tools are more likely to innovate, which can assist these businesses in staying ahead of the competition in a fast-paced global digital economy.

Chart 11: Types of innovation using digital tools*

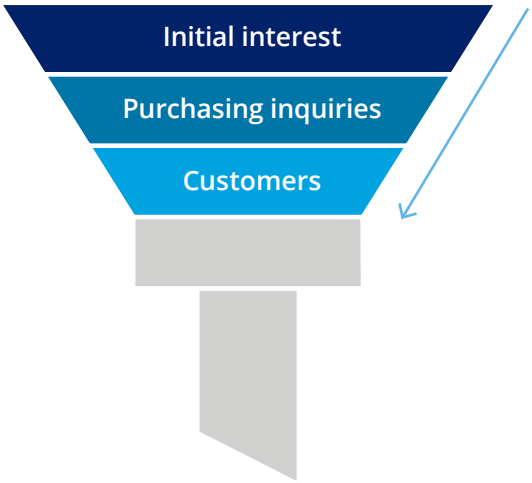


** Respondents were able to select more than one answer.*
Sources: Deloitte Access Economics, Research Now (2017)

Digitally engaged small businesses experience benefits across the sales funnel

Digital tools can help small businesses succeed by diversifying their customer base and supporting innovation, which represent two channels through which more digitally engaged businesses can reap greater growth dividends. Another way that digital tools can drive revenue growth is by increasing customer activity throughout the sales funnel – from initial interest, to purchasing inquiries, to customer numbers (Figure 2). A survey of 1,000 US customers found that half of consumers believe that it is important to interact with businesses online (Microsoft 2016). While physical shopfronts will remain a part of the customer experience, digital channels may be useful in facilitating initial contact with or providing additional information to customers.

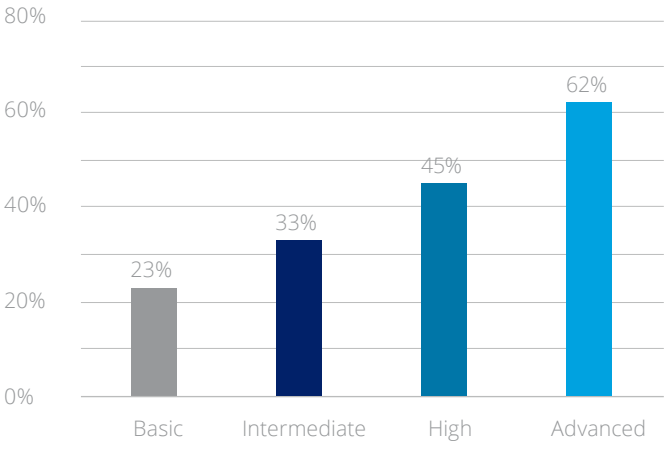
Figure 2: Different levels in the sales funnel



Source: Deloitte Access Economics (2017)

At the first level of the sales funnel, businesses that have higher digital engagement can make greater use of web and social channels to garner initial interest from customers. Our econometric modeling finds that those small businesses with advanced digital engagement had a 62% likelihood of experiencing an increase in initial interest levels, such as calls and leads, over the past 12 months – almost three times as high as those with only basic digital engagement (23%). Businesses with intermediate and high levels of digital engagement also experienced dividends, with a respective likelihood of increased initial interest of 33% and 45% (Chart 12).

Chart 12: Likelihood of experiencing increased initial interest over the past 12 months



Sources: Deloitte Access Economics, Research Now (2017)

Chart 13: Likelihood of experiencing increased purchasing inquiries over the past 12 months

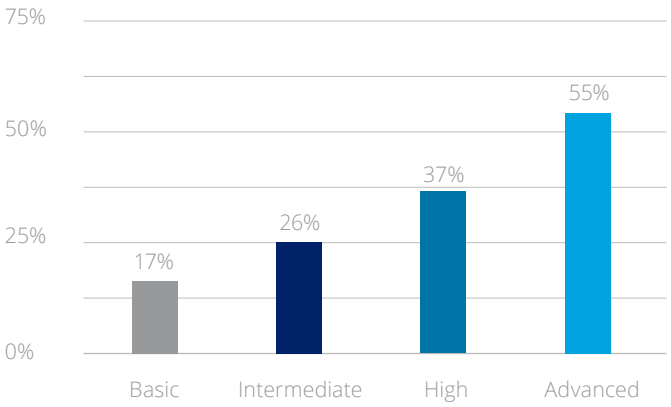
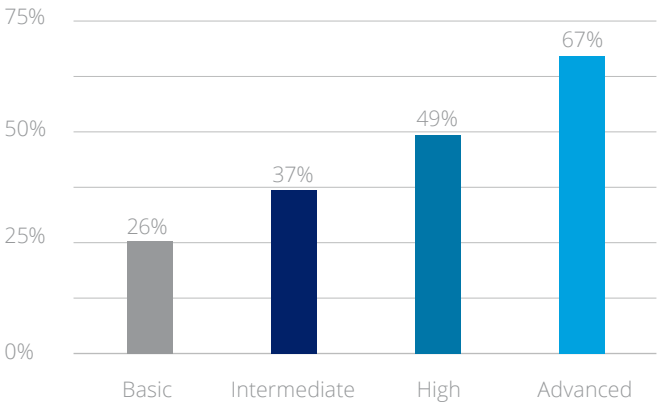


Chart 14: Likelihood of experiencing increased customers over the past 12 months



Sources: Deloitte Access Economics, Research Now (2017)

The benefits of digital engagement also extend down to the next level of the sales funnel in terms of increased purchasing inquiries such as in-store visits, orders and service requests. Over the past 12 months, businesses with an advanced level of digital engagement had a 55% likelihood of experiencing an increase in purchasing inquiries, which was again three times as high as the 17% likelihood for those small businesses with basic digital engagement (Chart 13). Having more digital communications channels, such as across different varieties of social media, is likely to facilitate increased customer engagement and therefore drive higher purchasing inquiries.

With higher interest and inquiries, digitally engaged small businesses also had a measurable improvement at the final level of the sales funnel with respect to customer numbers. Our analysis finds that two-thirds of digitally advanced businesses experienced rising customer numbers over the previous 12 months, compared with only a quarter of small businesses at a basic level of digital engagement. This suggests that digital tools that make it easier for customers to purchase goods and services, such as allowing customers to make bookings and orders online or having products available on third party platforms and marketplaces, will be important for pulling customers through the sales funnel.

These digital gains across all levels of the sales funnel will ultimately provide a channel for increased revenue growth and job creation amongst highly digitally engaged small businesses. Our results are consistent with previous research on the benefits of digital tools. For example, a recent report *Digital Opportunities for Today's Small Business* – which focused on the specific role of customer relationship management (CRM) software in the sales cycle – found that firms with CRM systems have, on average, 44% higher revenue than those with no system or basic systems (Deloitte Access Economics 2017).

Garnering customer interest is strongly linked to the advertising aspects of digital engagement, such as websites and social media channels. But clearly, it's about more than that. More sophisticated marketing, such as video advertising, and search engine optimization and marketing techniques; better websites to transact; and better tools for managing customer inquiries and data can enable US small businesses to succeed with customers throughout the sales funnel.

Coming later in 2017

The next report in this series will delve deeper into the how and why of small business digital engagement.

This report is the first of two reports that aim to provide fresh insights into the use of digital tools across US small businesses. The second report, due for release in the second half of 2017, will delve deeper into the how and why of digital engagement amongst US small businesses.

Our research in this second report will build on the findings of this report by examining variations in digital engagement levels across different US small businesses. It will also look at the internal dividends associated with the use of digital tools, what barriers exist that may prevent small businesses from increasing their digital engagement, and what businesses can do next to succeed in an increasingly digitized world.

However, the message around the importance of digital engagement to US small businesses is already clear. The analysis presented in this report clearly highlights that there are significant digital dividends to be gained by small businesses that have a sophisticated digital strategy and engage with a range of digital tools. In a dynamic and competitive business landscape, the evidence shows that digital technologies can provide small businesses with the edge to succeed and grow in the future.

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Appendix: Modeling methodology

Survey

Data for this project was gathered using an online survey fielded by Research Now. Research Now surveyed a nationally representative sample of 2,013 small businesses in the United States, defined as businesses with fewer than 250 employees. The majority (92%) of the sample had fewer than 100 employees.

Respondents to the survey were either small business owners themselves, or directors or managers of a small business. As part of the survey, respondents were asked questions about the business' levels of engagement with various digital tools, performance with respect to metrics such as revenue and employment growth, and general business characteristics such as age, industry and location.

Classification

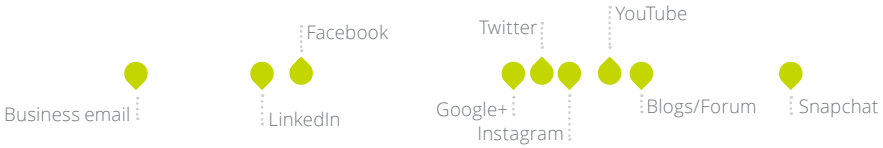
Each small business was classified into one of four levels of digital engagement. This classification was based on their use of and engagement with a number of different types of digital tools, including their web presence, social media, online platforms, advanced marketing tools (e.g. search engine marketing and video advertising) data analytics and digital collaborative tools. Digital engagement levels therefore measures technology availability and sophistication in the use of digital technologies among sampled small businesses.

The intensity of digital engagement is computed using multiple correspondence analysis (MCA), a dimension reduction technique that is designed to summarize highly relevant information. We compute the intensity of each businesses' digital engagement using the first dimension score based on respondents' answers to the survey questions relating to their use of digital tools. The variation in answers to these questions regarding use of digital tools can be regarded as driven by a common (unobservable) factor – their overall level of digital engagement. The MCA method attempts to quantify this digital engagement factor on a single dimension, as a linear combination of all survey responses to questions regarding each small businesses' use of digital tools.

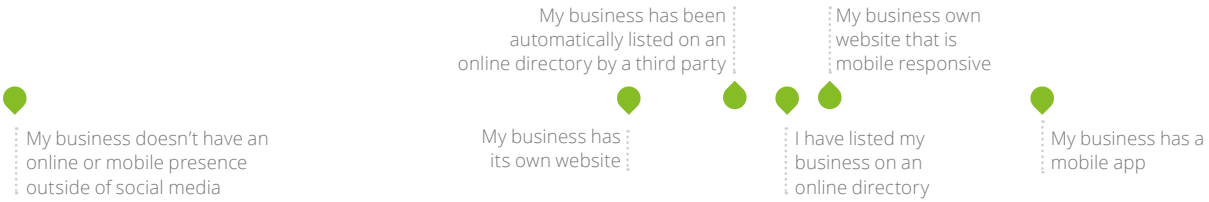
To illustrate, Figure A.1 shows the MCA factor loadings associated with responses to survey questions about business use of digital tools, such as their web presence and use of data analytics. Taking question 10 about web presence as an example, it can be seen a relatively higher digital engagement score is awarded to businesses with a mobile app, followed by those with mobile responsive websites. Those businesses that have no online presence outside of social media get the lowest digital engagement score for this question.

Figure A.1: Illustration of MCA factor loadings for survey questions on small business use of digital tools

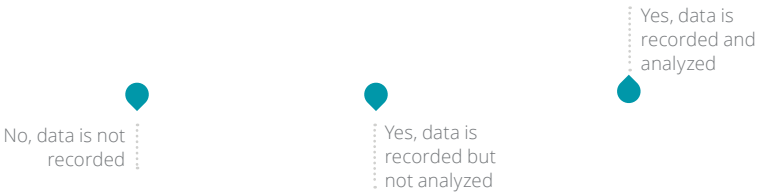
Q9. Which of the following does your business use for commercial purposes (customer engagement, sales and marketing)?



Q10. Outside of social media, which of the following apply to your business?

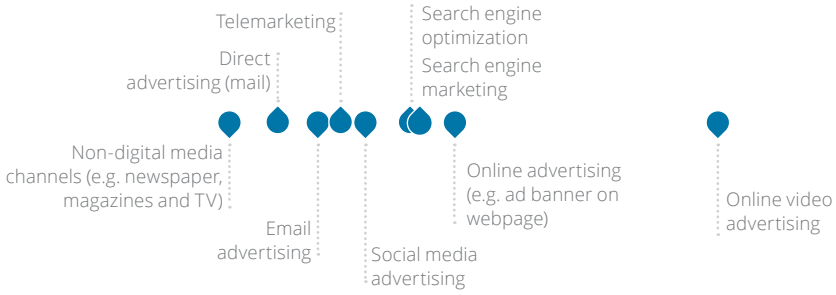


Q11. Does your business record and/or analyze data about visitors or customers to its website?

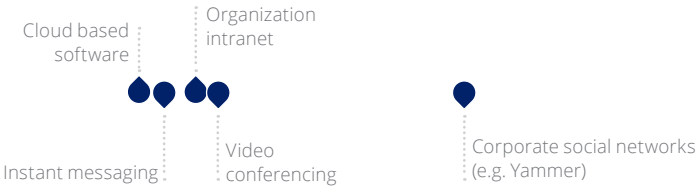


Q13. Which of the following methods of online engagement with customers does your business offer?

Q14. What types of advertising does your business engage in?



Q15. Which of the following digital tools does your business use for internal purposes, e.g. to improve internal productivity or processes?



The overall digital engagement score for each small business is a weighted average of the factor loadings across all survey question responses relating to a business' use of digital tools. This digital engagement score is then used as a predictor in the regression model to assess the statistical relationship between business performance and digital engagement. Small businesses are classified as being at different levels of digital engagement based on how their overall digital engagement score ranks relative to other businesses in the sample:

- Basic digital engagement – the cluster of small businesses with digital engagement scores below the 20th percentile
- Intermediate digital engagement – the cluster of small businesses with digital engagement scores between the 20th and 50th percentiles
- High digital engagement – the cluster of small businesses with digital engagement scores between the 50th and 80th percentiles and
- Advanced digital engagement – the cluster of small businesses with digital engagement scores above the 80th percentile.

Econometrics

Econometric modeling is used to identify the relationships between digital engagement and business performance. The econometric model estimates the impact of digital engagement on revenue growth, employment growth, innovation, export activities, and customer interactions throughout the sales funnel.

Our modeling approach is primarily driven by the underlying characteristics of the data. While some variables, such as expectations of future revenue growth, innovation and exports can be categorical in nature (i.e. respondents identified one of multiple possible options), others such as revenue growth and growth in the number of employees can be continuous variables (i.e. respondents could nominate any number as a response). In this research, we applied a combination of linear and probit regression frameworks to measure the statistical relationship between the variables.

For all regression results presented in this report, the estimated coefficient on the digital engagement variable was statistically significant at the 5% level. Note that in addition to digital engagement, other explanatory variables were included in all regressions in order to control for other small business characteristics and isolate the impact of digital engagement on business performance. These control variables included the age of the business, its industry, and the location of its primary operations.

Linear regression framework

Simple ordinary least squared (OLS) regression models are applied on continuous variables, including nominal revenue growth and growth in the number of employees.

Probit regression framework

Probit regression, also called a probit model, is used to model binary outcome variables. For example, the possible responses to the survey question on expected revenue growth are illustrated below in Figure A.2.

Figure A.2: Survey question and responses on expected revenue growth

What are your expectations for your business' total annual revenue over the next 12 months?

- Significant decline in revenue
- Some decline in revenue
- Remain relatively unchanged
- Some growth in revenue
- Significant growth in revenue.

To determine the likelihood of expecting revenue growth over the next 12 months, we define the outcome variable in a binary fashion where the responses of 'significant decline in revenue', 'some decline in revenue' and 'remain relatively unchanged' is assigned a value of 0; and the responses of 'some growth in revenue' and 'significant growth in revenue' is assigned a value of 1.

Having defined the outcome variable as binary (0/1), we then model the conditional probability of a 'successful' outcome (y=1) as a linear combination of the predictors. For the purposes of this report, the predictor variables were the level of digital engagement, age of the business, location and industry. This can be conceptualized as follows:

$$p = pr[y = 1|X_{1i}, \dots, X_{Ki}, \beta_0, \dots, \beta_K] = \Phi\left(\beta_0 + \sum_{k=1}^{K} \beta_k X_{ki}\right)$$

Where Φ(.) is the cumulative distribution function of the standard normal distribution. The marginal effects in the probit model were calculated as follows:

$$\frac{\partial pr[y = 1|X_{1i}, \dots, X_{Ki}, \beta_0, \dots, \beta_K]}{\partial X_{Ki}} = \beta_k \Phi(\beta_0 + \sum_{k=1}^{K} \beta_k X_{ki})$$

Where the regression coefficient (βk) depends on the values of the predictor variables and the regression coefficients. Note that the 'basic' digital engagement level was chosen to be normalized for the purposes of identification.

Causality

It is important to note the issue of causality, specifically with respect to the relationship between revenue growth and digital engagement. It is possible that higher levels of revenue growth drives more digital engagement if strongly performing small businesses had more time or resources to invest in digital tools. Notwithstanding this, our research is also able to provide insights into the ways in which digital engagement facilitates growth – through increased exports, innovation and customer interest, as well as based on the evidence presented in our case studies. This suggests that the primary causal direction of the relationship is that small businesses are indeed reaping significant growth benefits as a result of increased use of digital tools.

Interpretation

Note that the reported results represent the average relationship between digital engagement and business performance across the nationally representative sample of US small businesses, after controlling for other business characteristics (including age, location and industry). Experiences of individual small businesses are likely to vary around this average, as it is possible that the impact of increasing use of digital tools by any particular business could be different from the average effect.

Meet the team

John O'Mahony
Partner, Deloitte Access Economics
joomahony@deloitte.com.au
+61 2 9322 7877

Sara Ma
Manager, Deloitte Access Economics
sarama1@deloitte.com.au
+61 3 9671 5995

Deloitte.