THE CONNECTED WORLD

DIGITAL SWEDEN

HOW CONSUMERS ARE SETTING THE PACE AND CREATING OPPORTUNITIES FOR BUSINESSES

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HOW CONSUMERS ARE SETTING THE PACE AND CREATING OPPORTUNITIES FOR BUSINESSES

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commissioned by
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THE PRIMARY OBJECTIVE OF this report is to study how the internet creates opportunities for consumers and businesses in the Swedish economy. Specifically, we aim to i) describe the evolving demand for internet-driven consumption in an era of rapid smartphone and tablet growth, ii) explain how this demand is being met by Swedish businesses, with a focus on small and medium-sized enterprises (SMEs) and the opportunities that further digitalization presents for them, and iii) examine the impact on the Swedish economy of the interaction between consumers and businesses. Key findings in this report include:

- Growth of the internet’s share of the economy has been faster than expected and Sweden continues to be among the top in BCG’s e-Intensity index; however, all of the other top 15 nations are developing more quickly.

- The Swedish consumer is driving the digitalization of the economy, and is now rapidly becoming familiar with using mobile devices to access the internet and make online transactions.

- Businesses that deploy sophisticated digital tools are able to achieve higher growth and better profitability, but many Swedish SMEs still struggle to effectively identify and implement elements of the digital toolkit that would unlock this potential.

This report builds on our previous publication, Sweden Online. Key highlights from the 2011 report included:

- The internet contributed an estimated SEK 205 billion, or 6.6 percent of GDP, to the Swedish economy in 2009.

- Beyond GDP, consumers gain significant value from research online before purchase offline (SEK 85 billion), from the digital consumer-to-consumer resale market for goods (>SEK 200 billion), and from free digital content.

- Businesses benefit from a vast digital business-to-business marketplace (close to SEK 1 trillion) and are being transformed by internet-driven productivity gains across the entire value chain.

We hope that this report will add to the ongoing debate on how Sweden can further develop as a leading digital nation and also provide practical ideas and inspiration for businesses that aim to increase their competitiveness through digitalization.
At the heart of Sweden’s vibrant and dynamic society is a tradition of innovation that has facilitated the rapid adoption of new technologies, which are the basis for the ongoing digital transformation of the economy. Swedish consumers continue to adopt new behaviors to exploit the proliferation of connected devices and applications, encouraging the nation’s entrepreneurs to experiment with new products and business models that leverage the power of a globally integrated internet economy. The result is a promising environment for digital development that supports the many global leaders and local champions pioneering the opportunities created by the emerging digital economy.

Digital Sweden: How Consumers are Setting the Pace and Creating Opportunities for Businesses seeks to describe and quantify the key drivers behind this transformation and to identify some of the hurdles that remain for SMEs as they seek to enhance their presence online.

Growth of the internet’s share of the economy has been faster than expected, and Sweden continues to be among the top performers in BCG’s e-Intensity index; however, all of the other nations in the top 15 are developing more quickly

- The share of economic activity driven by the internet has grown at 10.3 percent annually and in 2012 totaled SEK 275 billion, or 7.7 percent of the total Swedish economy, a level of economic activity comparable to that of the construction and utilities industries combined

- Growth has been faster than forecasted by BCG in 2011, driven by a surge in online consumption from SEK 109 billion in 2009 to SEK 160 billion in 2012, with growth across all major categories of spending; this has been boosted by widespread adoption of new mobile devices, such as smartphones and tablets
While online consumption has grown at 13.5 percent per year since 2009, business and government investment have grown at 5.5 and 2.4 percent respectively.

The internet’s share of the economy will continue to significantly outstrip growth in traditional business, expanding by 7.7 percent annually through to 2017, by which time the internet economy is expected to be worth SEK 398 billion, or 9.5 percent of GDP, almost as big as the retail and wholesale industries combined.

However, while we believe growth will continue to be strong, there are signs that key enablers and measurements of business and government engagement are developing more slowly than those of other top-ranked internet economies, suggesting that Sweden needs to keep working hard to retain its global leadership position.

The Swedish consumer is driving the digitalization of the economy and familiarity with using mobile devices to access the internet and make online transactions is increasing.

More than 70 percent of Swedes are now familiar with online shopping and 20 percent have made purchases using mobile devices; Swedes now spend 40 percent of their online time on mobile devices.

This digital consumption is being enabled by new payment models and an increase in consumer trust regarding online interaction.

Swedes derive a significant amount of value from their consumption of digital media, getting six times more value-for-money than from traditional forms of media.

Consumers with multiple devices derive 50 percent more value from the internet; half of the population has three or more online devices and by 2015 more than 70 percent are expected to be similarly enabled.

Adoption of new mobile devices has generated a 3:1 multiplier effect: each additional krona spent on hardware has driven an additional three kronor of downstream spending on connectivity and online consumption.

Businesses that deploy sophisticated digital tools are able to achieve higher growth and better profitability, but many Swedish SMEs still struggle to effectively identify and implement elements of the digital toolkit that would unlock this potential.

Top performers on BCG’s Digitalization Score have grown more than twice as fast as their less-advanced peers while also enjoying higher rates of profitability.

The most successful companies make better use of the digital toolkit with systems like online CRM, sales analysis, price comparison, and order management.
• Many SMEs struggle to keep up with these fast-moving technologies; half of Swedish businesses lack awareness of the options and the time and expertise necessary to deploy them

• The move to mobile platforms is a particular challenge; while nearly 30 percent of SMEs now have mobile-enabled websites, only 5 percent of marketing spend is on mobile devices and only 8 percent of companies have adapted their CRM systems to track their mobile customers

• Swedish SMEs score well on international rankings for online presence but make less use of advanced commercial tools than some European peers

• SMEs that succeed in deploying the digital checklist have gained between 0.2 to 0.5 percentage points of additional growth for every 10 percent of customer, supplier, and employee interaction that they have managed to shift online

While Sweden continues to grow its digital sector and ranks highly on major international indices tracking internet-related activity, we have seen a slowdown in Sweden’s development on BCG’s e-Intensity metrics that track business and government engagement online. There is opportunity for government, policy makers, and private companies to help build awareness of the digital opportunity among Sweden’s thousands of ambitious SMEs, and to support them in further exploiting the opportunities offered by the continued digitalization of the economy.
Sweden is a digital nation—Swedes of all ages actively seek out opportunities to use the internet throughout their daily lives (see Exhibit 1). Roughly 90 percent of the population has internet access, and extensive fiber networks deliver high-speed fixed connectivity together with the world’s first and fastest Long Term Evolution (LTE) mobile data network.

With internet infrastructure rated the third best in the world in BCG’s latest e-Intensity Index, it is no wonder that Swedes spend much of their time online. On average, Swedes spend 24 hours per week online, with half of that time spent online at home. One consequence of this is that the amount of streamed TV and music has doubled over the past three years. Swedes also spend more than three hours per week accessing the internet while commuting or spending time outdoors, double that of 2011. This trend is expected to continue as the internet penetrates almost every daily activity in Sweden.

Swedes are Rapidly Going Mobile. Today, more than 40 percent of time online is spent on a mobile device (smartphones and tablets), up from 10 percent in 2009. Much of this online time is in the home, the impact of which can be seen in the sales of personal computers, which dropped 14 percent in the first quarter of 2013 as consumers opted for new, more agile, devices.

AN ONLINE NATION GOES MOBILE

- Roughly 90 percent of Swedes are connected to the internet and more than half of the population owns a smartphone
- Swedes spend an average of 24 hours per week online (10 hours on mobile devices) and over 50 percent have at least three internet-enabled devices
- The internet economy is growing at 10.3 percent annually, contributing SEK 275 billion in 2012, or 7.7 percent of Swedish GDP
- Sweden ranks third in the BCG e-Intensity index, but other well-developed internet economies are growing faster
- By 2017, Sweden’s internet economy is expected to grow to SEK 398 billion, or 9.5 percent of total GDP
By 2015, only five years after the first tablet was originally launched, worldwide sales of this new format are expected to exceed those of laptops and desktops combined. Swedish consumers are already switching to tablets, and consumer sales of the devices exceeded those of traditional laptops and desktops in 2012. This is part of a trend toward multi-device access, with consumers expecting to access familiar content and applications across their many screens at home, in their pocket, and at work. More than half of all consumers have three or more internet-connected devices; a growing minority (5 percent) of consumers use more than six access devices, such as game consoles, TVs, and e-readers (see Exhibit 2).

Consumption Drives the Internet Economy
To measure the impact of Swedish digital activities on the overall economy, we have updated our assessment of internet GDP based on the methodology pioneered by BCG in 2010. We calculate the size of the Swedish internet economy to be SEK 275 billion, or 7.7 percent of total GDP in 2012, an increase over the 6.6 percent of GDP in 2009 (see Exhibit 3). This means that the internet economy has grown by SEK 70 billion in three years, an annual growth rate of 10.3 percent, slightly faster than we forecasted.

Consumption. Digital consumption has been the main driver behind the increase of the total internet economy, accounting for more than 80 percent of growth from 2009 to 2012. More than 50 percent of the internet economy is driven by consumption, accounting for roughly SEK 160 billion and growing at 13.5 percent per annum. Growth is being driven in part by the rapid adoption of new mobile devices, which in turn are driving online interactions and e-commerce. The analysis suggests that for every additional krona spent on devices, another krona is spent on access and two more on online transactions, yielding a 3:1 multiplier on device expenditures.

Investment. The second-largest component of the Swedish internet economy is comprised of private investments in information, communication, and technology (ICT) related goods and services worth SEK 50 billion. One-fifth of this, or SEK 10 billion, comes from telecommunication operators’ capital expenditures on network infrastructure, with the remaining portion driven by non-telecommunication companies investing in hardware, software, telecom equipment, and ICT-related services. The investment component of the internet economy grew at 5.5 percent, in line with forecasts made in 2009, and slightly above the rate of growth for the Swedish economy as a whole (4.8 percent during the period).
EXHIBIT 2 | Consumers Increasingly Connect through Multiple Devices

Share of Swedish consumers accessing internet per device

<table>
<thead>
<tr>
<th>Year</th>
<th>Tablet (%)</th>
<th>Smartphone (%)</th>
<th>Computer (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>84</td>
<td>49</td>
<td>24</td>
</tr>
<tr>
<td>2010</td>
<td>16</td>
<td>48</td>
<td>55</td>
</tr>
<tr>
<td>2011</td>
<td>84</td>
<td>49</td>
<td>55</td>
</tr>
<tr>
<td>2012</td>
<td>16</td>
<td>48</td>
<td>55</td>
</tr>
<tr>
<td>2013</td>
<td>21</td>
<td>48</td>
<td>24</td>
</tr>
<tr>
<td>2014</td>
<td>21</td>
<td>48</td>
<td>24</td>
</tr>
<tr>
<td>2015</td>
<td>21</td>
<td>48</td>
<td>24</td>
</tr>
</tbody>
</table>

Share of Swedish consumers accessing internet by number of devices owned

- More than 6 devices
- 3–5 devices
- Fewer than 2 devices

Source: IIS; BCG European Media Consumer Survey (November 2012); Gartner; BCG analysis.

1Includes computers, laptops, mobile phones, tablets, game consoles, e-readers, smart TVs, and other consumer devices.

EXHIBIT 3 | The Internet Economy Now Makes Up 7.7 Percent of GDP

Size of the Swedish internet economy

<table>
<thead>
<tr>
<th>Component</th>
<th>2009</th>
<th>2012</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td>3.5</td>
<td>4.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Investment</td>
<td>1.0</td>
<td>1.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Government spending</td>
<td>0.8</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Net export</td>
<td>0.1</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Internet economy 2012</td>
<td>7.7</td>
<td>11.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Growth</td>
<td>1.8</td>
<td>9.5</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Source: Economist Intelligence Unit; Euromonitor; Forrester; Lotteriinspektionen; IE Market research; Statistiska centralbyrån; IAB/Google Consumer Commerce Barometer; Ovum; Gartner; International Data Corporation; Tieto; E-delegationen; Government officials; OECD; WTO; Post och Telestyrelsen; HUI; Svensk distanshandel; BCG analysis.
Government Spending. Public spending accounts for 10.3 percent of total internet economic activity, or SEK 28 billion, half of which is done by the central government. Public spending on internet technologies has grown at a stable 2.4 percent per annum since 2009, slower than the rate of growth for the overall economy, and is expected to continue to grow at 2.6 percent annually to 2017.

Net Exports. The remaining portion of the Swedish internet economy is driven by net exports of SEK 37 billion, which represent 17 percent of Sweden’s total export surplus. A majority of this surplus is driven by telecommunications exports, of which Ericsson makes up more than two-thirds.

Sweden is developing more slowly than the top 15 countries.

 Going forward, net exports are expected to return to stable growth after a rapid bounce-back following the 2009 financial crisis. This growth might be hastened if domestic Swedish business were able to capture a portion of the imports currently purchased by Swedes from foreign websites, often based in the U.S. or U.K. When queried, nearly half (49 percent) of Swedish consumers surveyed say that they seek out a foreign site due to the lack of domestic supply. The second most common reason for using a non-Swedish site, given by 32 percent of respondents, is to get a better price.

The Internet’s Share of the Economy 2017.
We anticipate the digital economy will continue to significantly outstrip growth in traditional business, expanding by 7.7 percent annually through 2017, by which time the internet economy is expected to be worth SEK 398 billion, or 9.5 percent of GDP, almost as big as the wholesale and retail industries combined. The online consumer will continue to be the main driver of growth in the internet economy, spending more on access and online retail.

Sweden in an International Perspective
The cluster of dynamic companies leveraging the nation’s internet infrastructure and brain power is a potent force for economic growth. Sweden was the most popular destination for venture investment as a percentage of GDP during the last five years. The list of companies that have emerged from this hub of digital startups is long, including well-known pioneers such as Skype, Spotify, Klarna, iZettle, King, Mojang, and Rebtel.

As seen in the previous section, however, the real driver of the Swedish internet economy is the consumer, who has pushed the internet economy to 7.7 percent of GDP. Although significant, it should be noted that this is only marginally higher than the share of the internet economy in the U.K. three years ago (7.2 percent), which was projected to grow at approximately 10 percent annually. Similar growth rates were estimated for many other OECD countries.

A similar pattern is seen in BCG’s e-Intensity Index, a measure of internet readiness, engagement, and expenditure, in which Sweden continues to rank third, behind Denmark and South Korea—but other countries are rapidly catching up. All of the countries in the OECD have grown their index scores above 10 percent annually, the rate of increase for Sweden, suggesting that the trend toward a digitalized economy is a truly global phenomenon (see Exhibit 4). Similar to the construction of airports and port facilities, the widespread deployment of internet infrastructure allows Swedish companies to more easily access customers and suppliers abroad, greatly increasing the potential scope of their market and range of opportunities.

However, the e-Intensity Index also highlights the need for continued strong investment to maintain global leadership. In all categories of enablement, expenditure, and engagement, Sweden is developing more slowly than the top 15 countries, with the largest growth gaps in government and business engagement. Sweden has dropped seven places in the ranking for government engagement (to eleventh place) since 2009.
and, while business engagement is now the second-highest in the world after Switzerland, the development trajectory is significantly lower than the average among peers.

In conclusion, digital consumption will likely continue to be a significant growth driver for the internet economy in Sweden. However, engagement from both businesses and government is needed to ensure that Sweden continues to be competitive and remains a leading internet nation.

Notes
1. IIS.
2. Swedroid.
3. BCG e-intensity index.
4. IIS; BCG European Media Consumer Survey.
5. IDC.
7. E-delegationen.
8. OECD; Ericsson; BCG analysis.
10. EVCA.
WEB AND MOBILE CHANNELS are rapidly emerging drivers of consumption as consumers shift their spending from more traditional channels. This trend is occurring at an even faster rate than we had previously anticipated, due to new devices fuelling new forms of usage. In 2012, Swedes spent SEK 4 billion more on internet devices than forecasted in our previous report. They also spent SEK 4 billion more on internet access and SEK 8 billion more on online goods and services.

Whole industries are being transformed by this move online. In several sectors, the online channel is now the predominant means of reaching customers. A reduction in concerns about payment security is reflected in increased confidence in online shopping, which was one hurdle identified by our 2011 study. Sensing the changing mood, marketers are following the shift in consumer behavior; digital marketing spend is significantly outgrowing traditional media, and mobile spend is growing the fastest of all forms of advertising.

Digital Consumption Growth

The strong growth of digital consumption has shifted entire segments of consumer retail to

REACHING THE DIGITAL SHOPPER

- Each additional krona spent on hardware drives an additional three kronor in downstream spending
- Seventy-two percent of Swedes shopped online in 2012, with 20 percent making at least one purchase via mobile
- The bulk of consumption categories are increasing in share of spend online
- The most significant share increases were in travel, clothing and accessories, and household goods
- Online food retail has doubled in value and the scope for continued rapid growth is huge
- Digital media generates six times more value-for-money for the consumer than traditional media
- Online marketing will soon be the leading form of customer outreach; mobile is growing the fastest at more than 30 percent annually
predominantly online business models (see Exhibit 5). The travel sector continues to have the highest rate of internet penetration, with roughly 90 percent of all sales going through the digital channel. This represents a profound transformation in industry logic—as recently as 2002, only 15 percent of travel spending was done online, and a visit to the local travel office was a typical way of planning for a vacation. The media and entertainment sector has also been thoroughly transformed by the consumer shift to online. The majority of spending in this category is now done online; by comparison, in 2002 only 10 percent of media was consumed online.\footnote{In absolute terms, the retail clothing and accessories sector had the largest increase in spending online from 2009, and the share of online consumption in this category has doubled. The retail food sector has also witnessed a significant underlying shift in behavior, with almost SEK 3 billion of groceries now purchased online, three times the value in 2009—the fastest rate of growth of all categories. While still only a fraction of the SEK 205 billion spent on groceries in Sweden, this trend is confirmation of the continued growth potential for online retail.}

In absolute terms, the retail clothing and accessories sector had the largest increase in spending online from 2009, and the share of online consumption in this category has doubled. The retail food sector has also witnessed a significant underlying shift in behavior, with almost SEK 3 billion of groceries now purchased online, three times the value in 2009—the fastest rate of growth of all categories. While still only a fraction of the SEK 205 billion spent on groceries in Sweden, this trend is confirmation of the continued growth potential for online retail.

**E-commerce: Mobile Next**

The majority of Swedes are now very familiar with shopping online—72 percent purchased something online during 2012.\footnote{Traditionally this digital trading has been conducted via a desktop or laptop computer, but with the digital center of gravity shifting to smartphones and tablets, their importance as purchasing platforms is also increasing rapidly. Last year, 20 percent of consumers made a purchase through a mobile device, twice as many as in 2010. And future expectations are high: 43 percent of mobile device users expect to buy more with their mobile devices in the future. Young consumers are driving the emergence of mobile e-commerce, with 15- to 34-year olds twice as likely to have made purchases through mobile as 35- to 64-year olds.\footnote{One example of an industry shifting rapidly to mobile is the world of finance, in which transactions via mobile applications now make up more than 25 percent of investment}}

Traditionally this digital trading has been conducted via a desktop or laptop computer, but with the digital center of gravity shifting to smartphones and tablets, their importance as purchasing platforms is also increasing rapidly. Last year, 20 percent of consumers made a purchase through a mobile device, twice as many as in 2010. And future expectations are high: 43 percent of mobile device users expect to buy more with their mobile devices in the future. Young consumers are driving the emergence of mobile e-commerce, with 15- to 34-year olds twice as likely to have made purchases through mobile as 35- to 64-year olds.\footnote{One example of an industry shifting rapidly to mobile is the world of finance, in which transactions via mobile applications now make up more than 25 percent of investment}
transactions such as trading stocks and bonds (see Exhibit 6). This share via mobile platforms has doubled within the last 18 months, according to one trading facilitator.5

Most mobile purchases are done through platform-based application (app) stores, such as Apple’s App Store, Google Play, and the Windows Store, where the platform owners are able to capture a large share of the purchase value. However, as consumer interfaces evolve, this is likely to change. On tablets, consumers tend to make purchases through the browser rather than via apps.6 As tablets become increasingly common, this is likely to shift the weight of mobile purchases away from proprietary venues toward open browser formats enabled by open payment solutions. On smartphones, the use of HTML5-based apps is already creating possibilities for companies to circumvent the control of app stores.

Established Payment Models
As consumers have become more familiar with their online retailers, security concerns regarding credit card fraud have abated, further unlocking the growth of online retail. In 2002, 63 percent of Swedish consumers were worried about credit card fraud online, versus 21 percent today. More than half of Swedes have used a credit card for online purchases,7 and more than half of all purchases on mobile devices are made via credit card (see Exhibit 7). When not using their credit cards, Swedish consumers prefer paying directly through their internet bank and through direct invoices rather than cash on delivery, retail financing, or micropayment services.8

However, the flipside of increased online payment security has been the emergence of more complex payment processes; the new 3D secure payment is one example of how it can sometimes be difficult for foreign consumers to purchase online from a Swedish site.9 Sweden still lags Denmark and the U.K., the most enthusiastic online shopping nations, in willingness to pay online. This suggests more work is needed to ensure that this medium is efficient and attractive for all users.10

The internet is disruptive in nature, creating new ways to monetize commercially outside of the traditional payment methods. For example, advertising-based payments, traditionally strong for TV and newspapers,
have been used extensively online and are
being further refined. Almost all digital
content can today be consumed “for free” by
accepting advertisements and, due to this,
Swedes are among those in Europe who pay
the least out of their own pocket for their
consumption of digital content.

The Success of Digital Media
BCG conducted a study released in April of
2013 to determine the value to consumers
across nine countries, including Sweden, of
their online activities. The results suggest that
Swedes already value their digital media
almost as highly as more traditional forms,
deriving SEK 13,800 of value from online
content, versus SEK 15,400 from traditional
media. However, to harvest such a bounty of
online content, they paid only one-sixth as
much (SEK 600) as for an equivalent basket
of traditional media (SEK 3,800). This means
that the consumer surplus (the difference
between value received and price paid)
generated from online media is significantly
higher in both absolute and relative terms.

Swedes enjoy a higher cost-benefit ratio for
online media than any of the other countries
in the survey. With returns like these on their
online activities, it is not surprising that
Swedes consumed nearly 30 percent more
digital media (by value) and enjoyed the
largest overall online surplus when compared
to France, Germany, the Netherlands, and the
United Kingdom (see Exhibit 8).

The research also shows that consumers
using three or more devices capture almost
50 percent more surplus than those using
only one or two devices (SEK 16,000 vs. SEK
11,000 per consumer).

Marketing Spend Going Digital
As consumers spend more time online, digital
marketing is increasing in importance (see
Exhibit 9). In 2007, internet-related
advertising accounted for 15 percent of total
ad spending in Sweden. It now accounts for
25 percent of spending and, in three years’
time, is expected to become the largest ad
medium, driving more than 30 percent of all
advertising spend.

A key element of internet ad strategies today
is the emergence of mobile interfaces. As
these grow in importance for online retail,
mobile marketing is increasing rapidly. Firms
in Sweden spent a total of SEK 400 million on
mobile marketing in 2012 (5 percent of all
online marketing), double the amount
committed during 2011, but still under-
represented given that 40 percent of
**Exhibit 8 | Swedish Consumers Benefit Significantly from the Internet**

Average annual consumer surplus per connected consumer by media category

Consumers receive 6x more value from digital media spend compared to equivalent spend on traditional media.

Digital media

- Sweden: 25x
- Netherlands: 22x
- Czech Republic: 21x
- France: 15x
- Poland: 15x
- U.K.: 9x
- Germany: 7x
- Ireland: 7x
- Italy: 6x

Traditional media

- Ireland: 2x
- Czech Republic: 3x
- France: 4x
- Germany: 3x
- Poland: 4x
- U.K.: 3x
- Sweden: 4x
- France: 4x
- U.K.: 3x
- Italy: 6x

Source: BCG European Media Consumer Survey (November 2012); BCG analysis.

Note: FX 8.5 SEK/EUR assumed.

**Exhibit 9 | Digital Soon the Largest Channel for Advertising**

Share of advertising spend by medium

<table>
<thead>
<tr>
<th>Channel</th>
<th>Share (%)</th>
<th>MSEK</th>
<th>Growth 12–15 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search</td>
<td>37</td>
<td>2,908</td>
<td>15</td>
</tr>
<tr>
<td>Display ads</td>
<td>29</td>
<td>2,251</td>
<td>4</td>
</tr>
<tr>
<td>Online catalogues</td>
<td>25</td>
<td>1,937</td>
<td>2</td>
</tr>
<tr>
<td>Web TV</td>
<td>3</td>
<td>256</td>
<td>17</td>
</tr>
<tr>
<td>Email</td>
<td>&lt;1</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>Mobile (Split below)</td>
<td>5</td>
<td>376</td>
<td>32</td>
</tr>
</tbody>
</table>

- Adaptation of website: 51, 192
- Apps: 17, 64
- Search advertising: 8, 30
- Banner advertising: 5, 19
- App advertising: 4, 15
- Other: 15, 56

Source: Konsumentverket; IRM; BCG SME survey; BCG analysis.
consumers’ time spent online is on mobile devices. By the year 2015, mobile marketing is expected to be worth more than SEK 1 billion, an annual growth rate of 35 percent.12

Of mobile marketing spend, 50 percent is allocated for adapting the company website to a mobile format, 17 percent is used for apps, and the remainder is bookmarked for advertising and other mobile marketing activities.

Swedes appreciate some forms of mobile advertising when done in a selective fashion. For example, email newsletters could be a very cost-effective way of communicating with customers if crafted in the right way. More than half of consumers would like to receive offers and information on their mobile device from a grocery store, clothing store, or retailer that they frequent, and almost 90 percent would value mobile marketing in the form of coupons or discounts.13

Marketing money follows the consumer. With the average Swede now spending 24 hours a week online, it is clear that digital marketing will continue to grow. Our survey of Swedish SMEs shows that all companies, independent of current levels of marketing spending, expect to more than double their allocation for mobile marketing in the near future.

NOTES
1. Forrester; BCG analysis.
3. IIS.
4. DIBS.
5. SVD.
6. DIBS.
7. IIS.
8. DIBS.
9. IDG.
10. DIBS.
11. BCG Follow the Surplus: European Consumers Embrace Online Media, April 2013.
12. IRM.
13. IAB.
Despite the familiarity of companies such as IKEA, H&M, and Electrolux, the bulk of economic activity in Sweden is driven by SMEs with fewer than 250 employees. Around half of the workforce, and a significant share of internet activity, is dedicated to these small engines of economic growth.

Businesses that make wider and more extensive use of the internet grow faster and are more profitable (see Exhibit 10). They derive their success from a range of business advantages generated by the digital tools that they use. For example, among SMEs using digital tools, close to 50 percent of procurement orders are now placed through an online tool and nearly half of their employee interactions are conducted in digital form.

Employees are increasingly using mobile devices for their internal interactions, with more than 20 percent of company communication conducted via mobile.

The advantages of digitalization span the value chain. More than half of SMEs confirm that their digital tools help expand their market reach. Just above 70 percent think that digital tools improve the efficiency of employee communication and 60 percent see benefits from decreasing procurement costs.

### Deploying the Digital Toolkit

- A significant “digitalization premium” is enjoyed by advanced SMEs, which grow 1.8 percentage points per year faster than their less-digitalized peers.

- This premium, and the benchmark level of digitalization, varies widely across industries.

- More-digitalized SMEs use digital tools to a higher extent to proactively engage with customers for internal operations and for commercial analysis.

- Mobile remains a challenge for many SMEs; however, mobile tools are gaining ground primarily for customer engagement.

- Awareness of the digital opportunity remains the main barrier to deploying more sophisticated strategies for many firms.

- Swedish SMEs are more present online than international peers, but primarily have basic website functionality.
These figures are derived from the BCG Digitalization Score methodology, which has been developed to measure the extent of digital interaction within and around a company.

We grouped our 547 SME survey respondents into quartiles according to their individual digitalization scores. The most-digitalized companies (the top quartile) have grown their revenues 1.8 percentage points faster since 2009 than the least-digitalized companies (those in the bottom quartile) and are 0.7 percentage points more profitable before interest and tax (EBIT margin). More-digitalized businesses outperformed their peers in other dimensions as well. The average employee of firms in the most-digitized group earns over 20 percent more than peers in the least-advanced group, and these top-performing companies have managed to achieve more than double the share of sales (40 percent) from new markets where the firm has no physical presence.

This “digitalization premium,” the relative benefit achieved from adopting online tools and processes, varies by industry. We analyzed the data by industry and compared the top and bottom quartile for each industry independently. From this assessment, we can see that firms engaged in Marketing/Advertising, Real Estate, Telecom, and Financial Ser-

### THE BCG DIGITALIZATION SCORE

The BCG Digitalization Score compiles three forms of digital interaction among and within companies. The score is calculated by balancing three measures equally: customer, supplier, and employee interactions. An alternate version of the score focuses specifically on mobile digital interactions and includes the same metrics but limits the data set to mobile parameters. A full description of the methodology can be found in the Appendix.
vices are among those for which the level of digitalization matters the most with respect to sustaining competitive advantage.

At the other end of the spectrum, several industries showed limited consistent advantage from higher levels of digitalization. These industries include Wholesale, Food Retail, and Construction, in which the types of companies and business models may be so heterogeneous that it is difficult to isolate the benefits to employing a digital strategy.

The Digital Toolkit
Swedish SMEs have access to a range of digital tools for commercial use as well as for managing their internal operations. Use of these tools has grown over time and almost 30 percent of companies surveyed have already adapted their website for mobile devices (see Exhibit 11). In increasing their mobile digitalization, companies are starting from their front-end operations, where the consumer is found. Close to 25 percent of companies are dedicating some part of their marketing budget to mobile interfaces.

One company that we surveyed within the asset management industry has enabled all employees with smartphones and tablets for their day-to-day work. Using these devices, the employees perform online sales analyses, connect with their customers remotely, and handle customer service directed from their mobile-enabled website.

Tools available to achieve competitive advantage online can be grouped into different categories. Our analysis suggests that the most-digitalized businesses differentiate more in areas related to proactive customer engagement, internal operations, and commercial analysis than their less-digitalized peers. Generally speaking, tools to manage customer experience on a company webpage are relatively more common and confer less competitive advantage, though their prevalence also suggests they have become essential components of the standard business toolkit.

Highly digitalized companies proactively engage potential customers to a far greater extent. More than 70 percent of the most-digitalized businesses use email newsletters and search engine marketing, while only 30 percent of the least-digitalized businesses use email newsletters and 40 percent use search engine marketing. In addition, firms with high mobile digitalization scores use social media twice as much as companies with a low mobile digitalization score. And these activities yield results—for every additional 10 percent of marketing spend shifted to digital activities, an SME enjoys a boost of 0.3 to 0.6 percentage points of additional growth.
For example, one medium-sized manufacturing company we interviewed has been working to move all customer interaction online by using search engine marketing, banner marketing, and social network initiatives. As a result, this firm has experienced annual growth rates of more than 20 percent and profit margins above the industry average.

Internal processes for highly digitalized businesses are also significantly different. For example, 70 percent of the companies in the top quartile use internet channels when recruiting, while only 20 percent of the least digitalized do the same. The highly digitalized companies are also three times as likely to use some form of digital communication tool (e.g., chat) for interactions among their own employees (see Exhibit 12).

Furthermore, highly digitalized firms gain advantage from tools used to analyze customer and sales data and to coordinate their sales activities. In this area, the most digitalized businesses stand out. More than

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### Exhibit 12 | The Digital Tools Checklist

*How highly digitalized businesses do things differently*

<table>
<thead>
<tr>
<th>Online Tool</th>
<th>Share of highly digitalized SMEs using tool (%)</th>
<th>Average penetration across all SMEs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email, newsletter</td>
<td>72</td>
<td>53</td>
</tr>
<tr>
<td>Search engine marketing</td>
<td>70</td>
<td>58</td>
</tr>
<tr>
<td>Social networks</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>Banner marketing</td>
<td>41</td>
<td>31</td>
</tr>
<tr>
<td>Actively managing review sites</td>
<td>35</td>
<td>29</td>
</tr>
<tr>
<td>Customer service</td>
<td>80</td>
<td>66</td>
</tr>
<tr>
<td>Product catalogue</td>
<td>70</td>
<td>54</td>
</tr>
<tr>
<td>Home page in English</td>
<td>50</td>
<td>36</td>
</tr>
<tr>
<td>Internal search engine</td>
<td>40</td>
<td>34</td>
</tr>
<tr>
<td>Online ordering</td>
<td>39</td>
<td>12</td>
</tr>
<tr>
<td>Mobile interface</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer reviews</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>Online customization</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>Online payment</td>
<td>21</td>
<td>15</td>
</tr>
<tr>
<td>Mobile application</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Delivery tracking</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Inventory status</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>CRM tools</td>
<td>51</td>
<td>36</td>
</tr>
<tr>
<td>Sales analysis</td>
<td>47</td>
<td>33</td>
</tr>
<tr>
<td>Sales coordination</td>
<td>46</td>
<td>32</td>
</tr>
<tr>
<td>Auto process customer data</td>
<td>39</td>
<td>31</td>
</tr>
<tr>
<td>Dynamic website adaption</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Order placement</td>
<td>88</td>
<td>81</td>
</tr>
<tr>
<td>Finding suppliers</td>
<td>85</td>
<td>76</td>
</tr>
<tr>
<td>Price comparison</td>
<td>76</td>
<td>61</td>
</tr>
<tr>
<td>Supplier payments</td>
<td>64</td>
<td>59</td>
</tr>
<tr>
<td>Mobile order placement</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Recruiting</td>
<td>68</td>
<td>49</td>
</tr>
<tr>
<td>Knowledge sharing</td>
<td>66</td>
<td>50</td>
</tr>
<tr>
<td>Internal communication</td>
<td>61</td>
<td>38</td>
</tr>
<tr>
<td>Mobile communication</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>Control of inventory</td>
<td>26</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: BCG analysis; BCG SME survey.
half of highly digitalized businesses use some form of digital CRM tool while only 15 percent of the least-digitalized businesses do so. More than twice as many of those in the top quartile, which enjoys an average growth rate of 1.8 percent more than the bottom quartile, have an online tool that helps coordinate sales activities.

Additionally, highly digitalized businesses use the internet more than their less-digitalized peers to research suppliers, engage with international customers (e.g., by having an English version of the website), and showcase their offering through digital catalogues.

There are significant disparities in the level of digitalization depending on company size and specific industry (see Exhibit 13). Smaller companies (those with fewer than 50 employees) are significantly less digitalized than bigger ones, owing to a combination of lower awareness of the opportunities and tools provided online and to a shortage of time and resources to master them. This is especially true for companies with fewer than 10 employees that still rely largely on offline interaction.

Digital Challenges

For less-digitalized businesses to better capitalize on online opportunities, a number of barriers spanning the company value chain must be overcome (see Exhibit 14). While almost all Swedish companies have internet access, many do not fully leverage the mobile opportunity. Employees of the least-digitalized SMEs are 30 percent less likely to have laptops or smartphones, and about half as likely to use tablets for work. About 30 percent of these businesses are not aware of the digital tools available, and do not possess the expertise needed to deploy them. Almost half of the businesses in the lower quartile complain that a lack of payment solutions for their customers is inhibiting further digitalization of their business.

The greatest single barrier to digitalizing remains a lack of awareness of the possible advantages derived from using digital tools.

**EXHIBIT 13 | Digitalization Varies Depending on Company Size and Industry**

<table>
<thead>
<tr>
<th>Distribution of SMEs according to size and digitalization quartiles</th>
<th>Distribution of SMEs according to industry and digitalization quartiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro (fewer than 9 employees)</td>
<td>Media &amp; Publishing</td>
</tr>
<tr>
<td>Small (10–49 employees)</td>
<td>Telecom</td>
</tr>
<tr>
<td>Medium (50–249 employees)</td>
<td>Knowledge-based Industries</td>
</tr>
<tr>
<td>Least digitalized (Bottom quartile)</td>
<td>Marketing/Advertising</td>
</tr>
<tr>
<td>(3rd quartile)</td>
<td>Wholesale</td>
</tr>
<tr>
<td>(2nd quartile)</td>
<td>Hotels &amp; Restaurants</td>
</tr>
<tr>
<td>Most digitalized (Top quartile)</td>
<td>Real Estate</td>
</tr>
<tr>
<td>Source: BCG analysis; BCG SME survey.</td>
<td>Financial Services</td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
</tr>
<tr>
<td></td>
<td>Energy &amp; Recycling</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
</tr>
<tr>
<td></td>
<td>Automotive Service</td>
</tr>
<tr>
<td></td>
<td>Food Retail</td>
</tr>
<tr>
<td></td>
<td>Transportation &amp; Logistics</td>
</tr>
<tr>
<td></td>
<td>Retail (non-food retail)</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
</tr>
</tbody>
</table>

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22 | Digital Sweden
Businesses using a digital CRM tool are, for example, about 70 percent more likely to think that the internet has helped them reduce their marketing costs and almost 60 percent more likely to believe that it has helped them expand their commercial reach geographically.

By contrast, more than 40 percent of the companies in the least digitalized quartile are not aware of the benefits that can be derived from mobile solutions and are therefore reluctant to invest in new technology. There is a clear opportunity for developers and suppliers of online and mobile solutions to help overcome this education barrier and promote easy-to-use tools for Swedish SMEs.

**International Leaders**

Despite the concerns raised above, which hinder some SMEs, the majority of Swedish companies do leverage the internet to a higher extent than their peers across Europe (see Exhibit 15). A higher share of Swedish firms, regardless of size, have a website and these websites are more advanced than those of the average European SME.¹

A deeper analysis, however, reveals that there is still some room for improvement. Small Swedish businesses are just above the EU average in using online order processing. The same holds for the use of website sales linked to internal systems, for which Sweden is not in the top five EU countries among small businesses.

In summary, there are a great many Swedish enterprises that have enthusiastically adopted the tools and tricks of the digital trade to gain advantage in their local and international markets. Overall, the rates of digital adoption in Sweden are high and are increasing in most areas, although some practical hurdles remain for firms lagging on the technical adoption curve. There is
therefore an opportunity for business and government stakeholders to find ways to help less-advanced firms capture the benefits of an increased digital presence.

**Note 1.** OECD.

**EXHIBIT 15 | Swedish SMEs Leading Digitalization, but Not Across the Board**

Top 5 OECD countries, Sweden, and EU average share of businesses with website functionality by size (%)

Source: OECD, based on euro stat data; BCG analysis.

**Note:** Selected OECD countries, 2010. EU average based on EU27 data.

1Electronic transmission of data suitable for automatic processing used for receiving orders from customers.

2Use of electronic transmission of data suitable for automatic processing for receiving orders from customers and also share information on sales with the software used for any internal function.

32011 data.
Our primary objective of this report was to illustrate the developments in and the importance of the internet, and how it creates opportunities for consumers and SMEs in the Swedish economy.

While Sweden is a leading digital economy, many other countries are catching up. In Sweden the consumer is driving internet development, with businesses and government trying to follow. Consumption makes up half of the internet’s share of the GDP, and is growing rapidly. By contrast, neither businesses nor government have increased their investments in the internet as a share of the economy.

The nation’s SMEs are relatively strong from a digitalization standpoint compared to other countries in the EU, but there is room for improvement. Given that more heavily digitalized SMEs are growing faster and producing higher profits, we anticipate that more SMEs will review their digital strategies.

Based on this, we encourage further debate on how Sweden can accelerate and sustain its leading position as a digital economy, in terms of SMEs specifically but also more broadly, and we pose the following questions:

1. What is required for more SMEs to make investments and apply the digital checklist to further grow their businesses?

SMEs that embrace new technologies and internet usage grow more quickly and are more profitable than their peers. What initiatives can the private and public sector launch across the country to educate and support SMEs interested in pursuing digital strategies? What can be done regionally in the municipalities to support SMEs? What can be learned from other leading countries in the EU and around the world?

2. How can large companies further support SMEs’ digital developments while also benefiting from making digital relevance a competitive differentiator?

Large companies, both local and MNCs, play an important role in building awareness and providing support to SMEs. How can large companies better support SMEs with their digital development and investments? In addition, how can large companies create a competitive advantage using digital relevance and innovation (e.g., driving online sales across the web and smartphones, leveraging smartphones/tablets for productivity gains, using cloud solutions and big data analytics)? How can large Swedish companies and MNCs increase their ambition level and investments in these areas?

3. Is there an opportunity for additional focus in Sweden on digital science and start-up innovation?
How can universities encourage and grow new fields of science, and potentially shift funding and resources toward the internet, mobile, media, and other digital and tech areas? How can cross-disciplinary research be encouraged, similar to what is seen in the medical technology field? Sweden ranks highly on digital innovativeness, with many fast-growing technology companies established there. What is required to create a more vibrant start-up and venture capital environment in Sweden?

4. What additional support and enablement can policy makers provide?

Swedish policy makers have a track record of fostering significant investments in broadband infrastructure and have supported technological developments in the past. As we move into the next wave of digital innovation, which increasingly stretches beyond infrastructure and hardware deployment, in what areas should public policy direct attention? What initiatives would have the largest impact on accelerating growth? How can Sweden learn from other successful countries, such as Denmark and South Korea?

The internet is, and will continue to be, a vital enabler and driver of the Swedish economy. Swedes have a fantastic track record of innovating and adopting new technologies, applications, and behaviors in the digital space. We hope this report will stimulate debate across all key stakeholders on how to maintain this enthusiastic participation and further accelerate digital developments in Sweden.
The assumptions and analyses that form the basis for this report are outlined in the exhibit below.

**BCG Digitalization Score**

The overall and mobile digitalization scores are formed as a weighted mean of three sub-categories of digital interaction: with customers, suppliers, and internal employees.

These sub-categories are in turn determined from weighted means of underlying metrics that measure the extent of digital interaction in a company. Unlike many other approaches for ranking company digitalization, the score does not take into account which tools a company uses, or to what extent a tool is used, but measures only the *outcomes* from deploying these tools on interactions—in other words, the impact from the tools.

The three sub-categories are:

**Customer Interaction.** To what extent does the company interact digitally with customers?

**Supply Chain Interaction.** To what extent does the company interact digitally with its suppliers?

### Methodology Overview

<table>
<thead>
<tr>
<th>BCG Digitalization Score</th>
<th>Share of digital interaction</th>
<th>Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Customer interaction</td>
<td>Share of ...</td>
</tr>
<tr>
<td></td>
<td>Supply chain interaction</td>
<td>• Orders originated from customers having found company online/mobile</td>
</tr>
<tr>
<td></td>
<td>Internal company interaction</td>
<td>• Customer orders from online/mobile</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Customer support online/mobile</td>
</tr>
<tr>
<td>Dimensions weighted equally under the assumption that value impact from each part of the value chain is equal</td>
<td></td>
<td>• Company procurement online/mobile</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Company procurement originated from supplier found online/mobile</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Employee interaction through online web interface (e.g., email, knowledge sharing)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Employee interaction through online mobile interface (e.g., mobile app, email)</td>
</tr>
</tbody>
</table>
Internal company interaction. To what extent do employees interact digitally with each other?

GDP

There are three methods of calculating GDP, all of which give the same result in theory, but none were designed with the internet in mind. The *production method* measures the value created through the production of goods and services. The *income method* measures total income earned by individuals and companies. The *expenditure method* measures total spending on finished goods and services.

The most direct method, and therefore the most commonly used, is the *production method*. This is how the contributions of most traditional sectors in the economy are calculated. This method is difficult to use when calculating the internet economy as it requires a very granular data set of online transactions through all layers of the economy. The OECD constructed an approach during 2012 using this method for calculating the value of the internet economy in the U.S. Although the calculations were based on an incomplete dataset and therefore not practical as a foundation for policy discussions (about 45 percent of the U.S. economy sectors have no internet-related data available), they sent a clear signal to statistical agencies around the world that more data—and higher quality data—is needed in the field.

The *income method* of GDP calculation has its own Achilles’ heel in requiring multiple assumptions about both the share of the income of traditional companies to be allocated to the internet and the share of the income of multinational companies to be allocated to Sweden. Those assumptions would call into question the accuracy of the final calculation.

The *expenditure method* of calculating GDP is based on the principle that the produced finished goods and services produced in a country must be bought by somebody, and thus the value of production must be equal to the total expenditure.

BCG pioneered the usage of the *expenditure method* in 2010 to estimate the size of the internet economy. This has since become the most applied methodology; multiple other stakeholders have used it and it served as the inspiration for the development of OECD’s calculation method. Although the expenditure method is also imperfect, we chose to use it because it reveals the contributions of consumers, businesses, and governments to the internet economy; it also approximates the sum of the online components of all of the other sectors. The expenditure method is built on four pillars.

- **Consumption**: Goods and services bought by households in Sweden over the internet, consumer spending on accessing the internet, payments to internet service providers, and the cost of the relevant portions of devices
- **Investment**: Capital investment by telecom companies related to internet and internet-related private investments in information and communications technology (ICT)
- **Government spending**: Public ICT spending on infrastructure and supporting services
- **Net exports**: Online goods and services and ICT equipment exported minus comparable imports

It is important to be clear about assumptions related to the internet’s contribution to the Swedish economy. Most significantly, the full value of goods sold online is counted because it gives a sense of the importance of the internet as a retail channel. While most online transactions terminate in the physical world, many would not happen without the internet as a catalyst. Data on the “online” value generated at each link in the value chain is largely unavailable, and estimating it would imply a false level of accuracy.

Below are the building blocks of the GDP when using the expenditure method and a description of how each of these has been estimated for the internet economy.

**Consumption.** Online spending is based on estimates from the IAB Europe/Google
Consumer Commerce Barometer survey and household expenditure data. Spending on access includes consumer fixed and mobile internet service provider charges: a proportion, based on time spent online, of spending on interface devices, such as computers or mobile phones, and infrastructure devices, such as wireless routers. Estimates are calculated using research reports and data from Gartner, the Economist Intelligence Unit, International Data Corporation, Statistiska centralbyrån, Post-och telestyrelsen, BCG case experience, and Ovum.

**Investment.** We estimate the value of fixed and mobile telecom investments based on data from the largest telecom operators in Sweden. In addition we estimate and allocate private investments in hardware, software, telecommunication equipment, and IT services based on data from Gartner allocated based on internet penetration. We did not include an estimate for internally developed software, even though it likely represents a significant element of internet-related capital expenditure, because too many assumptions would have been necessary.

**Government Spending.** We estimated public spending on ICT, including hardware, software, telecommunications, and support services, based on research by Gartner, IDC, E-delegationen, and interviews with government officials.

**Net Exports.** We estimated net exports of e-commerce based on data from Posten, HUI, Svensk Distanshandel, Svensk Handel, and a targeted consumer survey executed by HUI. Further, we estimated exports and imports of ICT goods and services based on data from OECD and WTO.
NOTE TO THE READER

The Executive Summary of this report is also available in Swedish. For a copy, please contact one of the authors.

Acknowledgments
The authors are grateful for the support of the many people who contributed their time and experience to the BCG team. We have engaged many industry experts, government officials, and managers at companies across Sweden, who provided valuable feedback on our analysis and conclusions.

This report would not have been possible without the enthusiastic participation of the 547 respondents to our survey, who took the time to reflect on the impact of the internet on their businesses.

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