DIGITAL TRANSFORMATION IN BUSINESS

– THE FACEBOOK COMPANY

2020

Copenhagen Economics

Authors
Sigurd Næss-Schmidt, Partner
Dr. Bruno Basalisco, Managing Economist
Signe Rølmer, Senior Economist
Benjamin Barner Christiansen, Analyst
Joshua Brown, Analyst
Lærke Kilsdal, Analyst

Copenhagen Economics

COMMISSIONED BY THE FACEBOOK COMPANY

Note: This report was commissioned by the Facebook company and prepared by Copenhagen Economics. The Facebook company did not provide any new or internal data to generate these estimates. All of the report's modelling is based on third-party or public data, alongside Copenhagen Economics' own estimates. All of the report conclusions have been drawn by Copenhagen Economics based on the report modelling results combined with existing research within the field. Copenhagen Economics is a specialised economics consultancy, working in the fields of competition, finance, impact assessment, regulation, and trade. For further information, visit www.CopenhagenEconomics.com.

PREFACE

Social media is a tool that allows consumers to interact with family, friends, and a wider social circle by sharing information and experiences in real time from their public and private lives. Massive reductions in the cost of information and communication technology and the proliferation of internet access have led social media to become an everyday tool for individuals and organisations across the globe.

However, social media is only one element of a larger group of digital tools that firms around the world use to build or grow their businesses by connecting with customers, suppliers, and present and future employees.

In 2019, Copenhagen Economics was asked by the Facebook company to explore how digital tools contribute to society in detail using two key approaches:

- Review the existing empirical evidence, looking primarily at how digital tools can create opportunities for growth by reducing marketing costs, providing a platform for sales, and facilitating expansion into new markets.
- Undertake a global survey of businesses to elicit how they use Facebook apps and technologies (Facebook, Instagram, Messenger, and WhatsApp) and how these apps and technologies have supported economic inclusion, hiring, expansion into new markets, and business activities.

The research presented herein was designed and conducted in 2019, including a global survey that gathered information about businesses' economic activity in the 12 months prior to Autumn 2019. The economic fundamentals underpinning the study results are informed by global trends up to 2019 and, accordingly, do not reflect economic and social impacts of the COVID-19 pandemic that have emerged in 2020.

While we understand that the world is a different place now, given our findings, we also provide perspectives on the role of social media in future economic recovery, rebuilding, growth, and overall welfare. In this respect, we focus in particular on the ability of such tools to further economic and social inclusion.

EXECU

UTIVE SUMMARY

Digital transformation is a process that significantly influences all parts of society. It is driven by the ever-increasing availability of digital applications on smartphones, laptops, and other hardware, combined with the ability of the individual to connect to the 3.5 billion people currently using the internet.[1]

In this context, researchers and policymakers have often focused their attention on mass information, communications, and technology companies that have developed new global digital tools. These tools have transformed how consumers, enterprises, the public sector, and other organisations around the world conduct their everyday lives and develop their activities.

To explore the role of social media in business, we conducted a global survey in 2019 to examine businesses' use of Facebook apps and technologies: Facebook, Instagram, Messenger, and WhatsApp (methodology outlined below). More than 15,000 businesses in 30 countries and regions provided information about their business activities in the previous 12 months. Using the survey results, we show evidence that

METHODOLOGY

This study investigates how firms used Facebook apps and technologies to support their businesses.[2] Our empirical approach is a survey of over 15,000 businesses across 30 countries and regions. Collectively, these countries and regions account for two thirds of global GVA. We estimate the GVA and exports that businesses attribute to their use of Facebook apps and technologies. Macro estimates are calculated by applying survey data to data found in the national accounts and scaling this to be representative of the 30 surveyed countries and regions.

By contrast, it is not within the scope of this analysis to capture the secondary impacts (indirect effects) through supply chains, nor the induced effects through employee spending. The estimates derived from the analysis should be viewed as gross figures; they do not take into account any substitution effects, displacement effects, or cannibalisation that may occur as a result of the use of Facebook apps and technologies or their potential substitutes. Similarly, the study does not seek to measure the incremental effect of Facebook apps and technologies on business performance, nor does it attempt to model a counterfactual world without Facebook apps and technologies.

[1] ITC (2018)

[2] Please refer to the Methodology Appendix for a description of the survey.

the Facebook company served as a catalyst for business development during that time. We further estimate the impact of Facebook apps and technologies in this period across 30 countries and regions, including the US, the largest economy in the world.

The study was undertaken at a time when the global economy was characterised by market expansion and relative prosperity. Its aim was understanding how digital tools could help businesses tap into the resulting opportunities to grow. In that context, the study found significant evidence that, during the surveyed period, a broad range of digital tools benefitted firms in all industries by creating more effective hiring practices, enabling firms to reach export markets, and reducing the costs of marketing and sales.

However, the economic conditions that businesses are encountering in 2020 differ markedly from those of last year, and as such, the findings relayed in this report are not necessarily directly applicable in the current environment. We would not expect to detect nearly the same results and patterns if this research were to take place at the current moment, which is characterised by significant and rapid economic contraction, disruption, and uncertainty related to the spread of COVID-19.

Nevertheless, the insights gleaned from the research are relevant for understanding the uses of digital tools for business and their potential to support future digital transformation across the economy. These findings can highlight opportunities and ongoing potential for businesses to tap into social media, including Facebook apps and technologies, as an important resource for business activity during a period of worldwide economic reconstruction. The evidence from 2018-2019 demonstrates that digital tools are uniquely positioned to support businesses globally. Thus, they remain viable for businesses that are now in the middle of crisis and seeking to leverage these tools to promote productivity and revenue recovery. As such, the metrics and findings from 2018-2019 trends may be useful for informing and guiding economic policy conversations in the post-COVID-19 era.

THE KEY RESULTS FROM THIS REPORT ARE:

Digital technologies and connectivity can drive economic inclusion of all businesses.

Essentially, the wide group of mostly free digital tools from the Facebook company, combined with the worldwide expansion of the internet, afforded less-advantaged groups the ability to connect their products and services with customers around the world and serve a wider, and sometimes even global, economy in 2018-2019.

We contend that digital tools could help to foster economic activity and further increase social inclusion in the coming years. In keeping with the UN Sustainable Development Goals, which highlight economic inclusion, we suggest that continued improved access to infrastructure and investments in digital skills for the regions and groups that currently have limited or no access to these resources would facilitate this economic activity and social advancement.

Digital technology can have a marked impact on hiring and jobs.

Digital tools allow employers to advertise job requirements for vacant positions quickly and at low cost, while giving applicants the ability to seek jobs in a wider geographical area, improving the overall functioning of the job market. In our survey, 29 per cent of firms using Facebook apps and technologies reported that they used the apps and technologies for hiring purposes in 2018-2019.[3] In addition to making hiring easier, digital tools and associated reduced costs may enable companies to retain their headcount by helping to increase sales, exports, and profit margins.

Digital technology can help firms access markets abroad.

We find that digital tools have lowered trade costs and offered firms a larger base of potential customers in both near and distant markets. In our survey of businesses across 30 countries and regions, we find a higher propensity to export by businesses using Facebook apps and technologies (44 per cent), compared to businesses not using Facebook apps and technologies (26 per cent), in 2018-2019.[4]

Digital technology can help decrease barriers to growth.

By lowering the costs of marketing and enabling wider customer reach, digital technologies — including, as an example, Facebook apps and technologies — can help businesses overcome barriers to growth. In our survey, 78 per cent of businesses that reported using Facebook apps and technologies used them for paid ads, free marketing, or finding new clients or customers in 2018-2019.[5]

[3] Please refer to the Methodology Appendix for a description of the survey.

[4] Please refer to the Methodology Appendix for a description of the survey.

[5] Please refer to the Methodology Appendix for a description of the survey.

INTRO

CHAPTER I:
DUCTION

Over the last few decades, the world has become increasingly digital, driven by widespread internet access, the emergence and prevalence of smartphones, and the development of numerous digital applications and tools. Businesses can now regularly communicate and conduct their activities faster and more efficiently than ever before. In 2018, it was estimated that the global datasphere would increase at a compounded annual growth rate (CAGR) of 27 per cent from 2018 to 2025.[1] Internet penetration globally has also expanded. According to a 2018 study from the ITC, 76 per cent of the world's population lives within access of a 3G network.[2] In 2016, close to 3.5 billion people were found to have access to the internet — more than triple the level in 2005.[3]

The rise of what is traditionally labelled as the 'digital economy' across global economies is undoubtably significant. However, current definitions of what the digital economy actually includes are somewhat vague.[4] It is well established that the digital sector is the core of the digital economy, driving the wider adoption of digital technologies in other sectors.[5] In this report, we look at the opportunities arising from the increased use of digital technology by businesses, with a particular focus on social media during a period characterised by economic and market expansion across the world.

Social media is one important technology in the digital space, and it has grown significantly in both importance and scope since it first appeared. Initially used almost exclusively by private individuals, social media is now also a tool that businesses can use to market products and reach customers.[6]

'Initially used almost exclusively by private individuals, social media is now also a tool that businesses can use to market products and reach customers.'

In this chapter, we gain a better understanding of digital technologies and how they have been used by businesses around the world (1.1), what social media is and how it can be used by businesses (1.2), and finally, how businesses have used Facebook apps and technologies (1.3). We base our findings on a unique survey of more than 15,000 businesses across 30 countries and regions and six continents conducted in 2019 for the purpose of preparing this study.[7]

---

1 IDC (2018)
2 ITC (2018)
3 ITC (2018)
4 OECD (2018)
5 IMF (2018). We do not consider digitisation, the process of converting information from a physical format into a digital one, separately.
6 See further description in Chapter 2.
7 See 'Estimation Methodology' on Page 12 as well as the Methodology Appendix for a description of the survey.

ESTIMATION METHODOLOGY

This study investigates how firms used Facebook apps and technologies to support their sales and the corresponding macroeconomic effect. Our empirical basis is a survey of 15,342 businesses. Relying on national account classifications designed to be comparable globally, we have structured the survey questionnaire and the economic modelling along 14 industry classifications.

As Facebook apps and technologies (Facebook, Instagram, Messenger, and WhatsApp) are most likely to contribute to businesses in the market economy, we adjust the number of industries by removing public sector industries, as their sales are most likely to be attributed to taxpayers, leaving us with 11 industries in total. Respondents were spread across all industries and all sizes of business across the 30 countries and regions in scope (which, taken together, account for two thirds of global value added (GVA)).

15,342
BUSINESSES

30
COUNTRIES & REGIONS

11
INDUSTRIES

We use micro-level survey data of businesses' use of Facebook apps and technologies, as well as how much businesses credit Facebook apps and technologies in their sales, and infer macro-level estimates based on best available national account data. The survey results were aggregated at the smallest unit of analysis feasible (given availability of macro data) for inference at the macro-level, namely the country- and region-sector level. Thus, a general limitation with this type of estimation method is that the broad geographical and industry scope of the survey reduces the sample size from which extrapolation takes place. A further common challenge is the reliance on online tools to administer the survey, which we account for by controlling for the extent of internet penetration variance by country/region.

While these countries and regions span the world, the aggregate results reported in this study reflect the set of 30 countries and regions rather than a global aggregate. Our quantitative macro estimates measure GVA and exports created by businesses using Facebook apps and technologies. This methodology is focused upon the businesses using Facebook apps and technologies and the influence they have on their ability to generate sales. Thus, it is not within the scope of this analysis to capture the secondary impacts (indirect effects) through supply chains, nor the induced effects through employee spending.

As is customary in comparable literature, this methodology does not capture any displacement effects that may occur as businesses prefer to adopt new services, new technologies, and new ways of doing business. Therefore, this study reports gross economic impact (GVA and exports), and has not been adjusted for activity that may have been displaced by the businesses' decision to adopt Facebook apps and technologies as one of their business tools. In other words, the study provides a snapshot of the aggregate business activity that currently leverages Facebook apps and technologies. Defining and modelling a counterfactual world without online activity or without online tools such as Facebook apps and technologies is outside the scope of this study. Similarly, the study does not seek to measure the incremental influence of Facebook apps and technologies on business performance.

1.1 TECHNOLOGY USE IN BUSINESSES IS AN IMPORTANT DRIVER OF VALUE

A consequence of the growing role of digital technology is the major transformation of how businesses — across industries, in and outside the digital economy — develop, produce, and market their goods and services. Examples of industries that have seen major changes in their business models due to emerging digital technologies include financial services, retail marketing, e-commerce, and the health sector.

Intuitively, we know that the adoption of digital technologies can add significant value to the economy and offer potential opportunities to companies.[8] Still, no consensus exists with respect to measuring the value of digital technologies to the economy, particularly in the case of technologies that are free. Two 2019 studies that estimate the consumer value of digital technology to the US economy — using different methods — find an additional contribution of digital content and services to annual GDP growth of between 0.05 and 0.30 percentage points per year (based on evidence up to 2017).[9, 10, 11]

As these and other studies reflect, contributions of digital technologies to the economy are likely to be significant, although variable. Measurement of digital technologies remains at the frontier of academic research, reflecting that accounting for the value of digital technologies in traditional national accounting is difficult and that better approaches need to be developed.[12]

For businesses, digital technologies are one of the key contributors to sales. As an example, social media platforms provide a large base of potential customers and effective ways to reach them.[13] This report is an empirical effort to measure the role of Facebook apps and technologies as a factor contributing to business activity around the world during a recent period characterised by global economic prosperity and market growth.[14]

[8] See e.g. OECD (2019b) describing how digital transformation represents an opportunity for improving productivity growth.

[9] Brynjolfsson et al. (2019) estimate the value of the Facebook app by giving Facebook app users the choice between 1) keeping the Facebook app or 2) giving up the app for one month and getting X USD in return. The payment amount, X, varies from $1 (USD) to $1,000 (USD), and, based on Facebook app users' responses, a value of the app is derived. The study estimates that US GDP growth would have been 0.05-0.11 percentage points higher per year during 2003-2017 if digital apps and technologies, like the Facebook app, had been included in the GDP calculation.

[10] Byrne & Corrado (2019) assume that demand for home service and paid-for service are complementary and estimate that accounting for value of digital services in GDP would add nearly 0.3 percentage points to the yearly growth rate of GDP. This was established by comparing the change in the estimated trend rate of real GDP growth from 1997-2007 to the 2007-2017 period.

[11] According to the Organisation for Economic Co-operation and Development (OECD), SMEs are small and medium-sized companies with fewer than 250 employees.

[12] See e.g. Brynjolfsson et al. (2019), which looks at the welfare contributions of the digital economy, currently not well-measured in national accounts.

[13] McKinsey & Company (2016)

[14] See 'Estimation Methodology' on Page 12 as well as the Methodology Appendix for a description of the survey.

1.2 FACEBOOK APPS AND TECHNOLOGIES ARE ONE OF SEVERAL DIGITAL PLATFORMS IN THE SPACE OF SOCIAL NETWORKING

Today, many people use social media to create and share their own content. Research on the building blocks of social media describes it as '[employing] mobile and web-based technologies to create highly interactive platforms via which individuals and communities share, co-create, discuss, and modify user-generated content.'[15] In other words, social media connects people by letting them share and create content, such as pictures, videos, and more. Social platforms include, among others: Flickr, LinkedIn, Pinterest, Tumblr, Twitter, Vimeo, YouTube, and Facebook apps and technologies (Facebook, Instagram, Messenger, and WhatsApp).

Each media or social platform has its own features for diversification and could be used differently by different businesses. From a business perspective, social media can help to connect companies with customers in more efficient ways, such as:

- Lowering companies' marketing costs. One study estimates that marketing costs can be lowered by up to 57 per cent for manufacturing and service small and medium-sized enterprises (SMEs).[16, 17]
- Providing a straightforward channel for customer feedback that can be used for product innovations.[18]
- Easing access to markets by decreasing the perceived distance between buyer and seller, making it easier to trade.[19]
- Lowering the cost of hiring, increasing the base for recruitment, and facilitating better matching between employer and potential employees. For example, online recruitment has been found to be 70 per cent faster and up to 90 per cent cheaper than traditional recruitment, e.g. newspapers.[20]

Facebook apps and technologies are important players in the social media space, in use by an estimated 160 million businesses globally in 2019.[21]

[15] Kietzmann et al. (2011)

[16] Asia Pacific MSME Trade Coalition (AMTC) (2018)

[17] According to the Organisation for Economic Co-operation and Development (OECD), SMEs are small and medium-sized enterprises with fewer than 250 employees.

[18] See further description in Chapter 2.

[19] See further description in Chapter 3.

[20] Ramaabaanu & Saranya (2014). See further description in Chapter 4.

[21] Facebook (2019a)

Facebook is a social media platform that individuals, businesses, NGOs, and public entities alike can sign up for and create a profile to share their own content, including pictures, impressions, and likes. It also allows users to create groups, ads, and fundraising campaigns.

Instagram enables users to share pictures and videos and offers an array of different editing options. Instagram also offers the functionality of the hashtag, a metadata tag used to organise and collect user-generated content.

Messenger is an embedded function of Facebook that also exists as a separate app. Its users can share messages, pictures, videos, polls, and their location, as well as make voice or video calls. The app also allows for one-on-one and group communication via text or calls. New features enable users to exchange money via the app (only available in a limited number of countries and regions).

WhatsApp holds similar functionalities as Messenger, allowing users to call or text each other; however, exchanges are encrypted. Like Messenger, WhatsApp also allows for communication one-on-one or in groups, but, unlike Messenger, WhatsApp does not require a Facebook account, instead connecting to users by their phone numbers.

1.3 BUSINESSES USE FACEBOOK APPS AND TECHNOLOGIES FOR ADVERTISING AND INTERACTING WITH CUSTOMERS

In this report, we will explore how digital technologies and tools help firms grow their businesses in three dimensions — sales, exports, and hiring — while also looking at ways digital technologies can improve the economic inclusion of historically marginalised groups. To explore the impact of these four areas on the economy, we conducted a survey of more than 15,000 businesses located in 30 countries and regions across six continents, asking businesses about their use of Facebook apps and technologies in 2018-2019. Using this data, we estimated the macroeconomic impact of Facebook apps and technologies on the surveyed countries and regions, including the US, for 2019. The survey includes both businesses that at the time reported use of Facebook apps and technologies and businesses that did not.[22]

While we look at business usage of Facebook apps and technologies as a whole during this period, businesses were not necessarily using every app. Which ones they chose to use also depended on various factors, such as their business model and the countries or regions in which they were active. We find that businesses used Facebook apps and technologies for a variety of reasons and functions, as shown in Table 1.[23]

[22] All apps are free to use. The Facebook and Instagram apps both offer opportunities for paid and free advertising options for businesses. Please refer to the Methodology Appendix for a description of the survey.

[23] Please refer to the Methodology Appendix for a description of the survey.

Table 1: *Business Use of Facebook Apps and Technologies*

Source: Copenhagen Economics

Functionality				
Find new clients and customers and communicate with customers	●	●	●	●
Advertise	●	●	●	–
Showcase products	●	●	●	–
Hire new employees	●	●	●	●

In this report, we find that digital technologies can be an enabler of inclusion. By offering low-cost alternatives to marketing, customer outreach, and hiring practices, the apps can empower business owners from historically marginalised backgrounds to start and run their own businesses. In our survey of businesses across 30 countries and regions, we find that businesses founded by women were more likely to describe Facebook apps and technologies as important tools for starting a business or overcoming business challenges than those founded by men.[24] This suggests that Facebook apps and technologies can be helpful tools for the empowerment of female entrepreneurs.

Digital technology and social media may also reduce firms' hiring costs and facilitate better candidate matches. In our survey of businesses, 29 per cent of firms using Facebook apps and technologies said they used it for hiring.[25] In particular, 61 per cent of firms using Facebook apps and technologies reported that they were an important tool for creating jobs in local communities.[26] Surveyed businesses across 30 countries and regions said that using Facebook apps and technologies helped them generate sales corresponding to an estimated $984 billion (USD) in economic activity last year.[27]

We also find that social media can help businesses overcome barriers to trade by reducing trade costs. In our survey of businesses across 30 countries and regions, we find that 70 per cent of businesses using Facebook apps and technologies considered them to be important for entering into new markets.[28] Surveyed businesses across 30

[24] Please refer to the Methodology Appendix for a description of the survey.

[25] Please refer to the Methodology Appendix for a description of the survey.

[26] Please refer to the Methodology Appendix for a description of the survey.

[27] Economic activity refers to the gross value added. Exact GVA estimate is $984,176,035,027 (USD). Please refer to the Methodology Appendix for a description of the survey.

[28] Please refer to the Methodology Appendix for a description of the survey.

countries and regions said that using Facebook apps and technologies helped them generate international sales corresponding to an estimated $342 billion (USD) in exports last year.[29]

Finally, social media has also been helpful for businesses seeking to overcome obstacles to growth during a period of economic expansion. From our survey of businesses in 30 countries and regions, we find that 78 per cent of businesses that reported using Facebook apps and technologies used them for paid ads, free marketing, or finding new clients or customers.[30] For some businesses, these tools replaced or postponed the need for a website, saving users the cost of managing and maintaining one.[31] Also, 83 per cent of business users of Facebook apps and technologies reported that the apps were one of several marketing channels that were used by the business.[32] Of the businesses using Facebook apps and technologies, 80 per cent stated that Facebook apps and technologies allowed them to increase sales in 2018-2019.[33]

$984

BILLION

Surveyed businesses across 30 countries and regions said that using Facebook apps and technologies helped them generate sales corresponding to an estimated $984 billion (USD) in economic activity last year.

In this chapter, we have discussed the role of modern digital tools in the world today and gained a better understanding of the role of social media, particularly how it can be leveraged by businesses. Lastly, we provided key insights from our global survey of more than 15,000 businesses in 2019.[34] We find that Facebook apps and technologies were primarily used for reaching, communicating with, and marketing to customers.

As noted in the Preface, businesses' economic circumstances in 2020 are very different from those in 2019, when the data collection for this research was conducted. Consequently, the magnitude of the above estimates for inclusion, hiring, exports, and sales for global businesses are not expected to be representative of current conditions. Nonetheless, they do provide important insight into the benefits of social media — and, consequently, potential opportunities and leverage points — as businesses seek to recover and rebuild in the coming years.

The remainder of the report is structured as follows. Chapter 2 discusses the role of technology in sales growth and how it has contributed to the global economy. Chapter 3 provides a closer look into exports as one of the channels by which digital tools have helped firms to grow. Chapter 4 analyses the role of digital technologies in hiring and the implications of sales growth (as it relates to social media use) on employment. Finally, in Chapter 5, we discuss the implications of firms' use of social media as a driver of the inclusion of minorities within the business world.

[29] Exact export estimate is $342,339,388,179 (USD). Please refer to the Methodology Appendix for a description of the survey.

[30] Please refer to the Methodology Appendix for a description of the survey.

[31] Please refer to the Methodology Appendix for a description of the survey.

[32] Please refer to the Methodology Appendix for a description of the survey.

[33] Please refer to the Methodology Appendix for a description of the survey.

[34] Please refer to the Methodology Appendix for a description of the survey.

DIGITAL TEC
AS
F

CHAPTER II:

CHNOLOGIES S A CATALYST FOR GROWTH

Businesses drive economic activity around the world. A business environment that is healthy — or one that is on the road to recovery — enables technological innovation, happy consumers, and a greater standard of living. An ideal environment enables businesses to increase their goods and services offerings through access to new markets domestically and abroad.

Market growth means attracting new customers and expanding business networks on an ongoing basis. Traditional efforts to achieve growth include marketing, new product design, new business models, and improved customer service and feedback methods.

These avenues all support potential business growth. However, each typically comes with associated costs that may be prohibitively high for some businesses. These cost barriers can inhibit a firm's ability to grow or rebuild, reducing the societal benefits associated with a healthy business environment.[1]

This chapter outlines how digital technologies can help overcome these barriers. We first clarify some key mechanisms (2.1) and explain why small and medium-sized enterprises (SMEs), in particular, may benefit from digital technologies (2.2).[2] These opportunities are in practice worldwide by enterprises of all sizes, and we highlight the effects identified, using a survey of over 15,000 businesses (2.3).[3] Finally, we perform a deep dive into the US, the world's largest economy (2.4), and then summarise the wider findings of the chapter (2.5).

[1] ITC (2018)

[2] According to the Organisation for Economic Co-operation and Development (OECD), SMEs are small and medium-sized enterprises with fewer than 250 employees.

[3] Please refer to the Methodology Appendix for a description of the survey.

2.1 DIGITAL TOOLS HELP BUSINESSES CREATE OPPORTUNITIES FOR GROWTH

Digital tools and applications can help firms reduce costs, overcome barriers to growth, and create new opportunities. For example, digital marketing can help **reduce the cost of both advertising and reaching customers** by offering a lower-cost alternative for firms to showcase their products and services.[4]

15 to 25%

digital marketing could improve overall business marketing effectiveness by 15-25%

Research estimates that digital marketing could improve overall business marketing effectiveness by 15 to 25 per cent. A closer look within the EU suggests that firms increasingly see digital marketing as an effective marketing tool, with 47 per cent of firms advertising on social media in 2017 — up from 39 per cent in 2015.[5]

Similarly, digital tools can help firms **reduce the costs of securing customer feedback and providing customer service** by utilising more cost-effective and direct communication methods, such as livechat functions on retailer webpages or 'customer impressions' on digital platforms.[6]

Finally, digital technology may help firms **secure funding**. Funding or capital is essential for many firms to grow or rebuild their businesses, enabling them to expand inventory, hire more staff, invest in additional production and equipment, and open physical outlets.

Lenders serving businesses need accurate information on a firm's financial situation when evaluating whether to provide a loan. For small firms with limited records and/or resources, this information can be difficult to secure, resulting in a barrier to funding or capital access. Digital technology can **improve access to information** and help facilitate options for funding by providing easier access to business records and credit scoring models through open banking, often in real time.[7]

Beyond open banking, crowdfunding has emerged as a viable alternative to traditional finance in recent years. With crowdfunding, smaller firms and individuals can raise funds through contributions from a large number of people (the 'crowd') instead of relying on professional investors.[8] In that sense, digital technology has taken fundraising from a traditional, carefully-placed, in-person solicitation to a fast-growing online 'event' to which all are invited.

---

[4] ITC (2018)

[5] Eurostat (2018, May 8)

[6] ITC (2018)

[7] Asian Development Bank Institute (2019). The Asian Development Bank Institute describes open banking as a system in which banks share their information with third parties, thereby making it easier to assess whether or not a business is creditworthy.

[8] Kaur & Gera (2017). There are different types of crowdfunding, ranging from donations to activities resembling equity finance, but all can be facilitated digitally.

2.1.1 SOCIAL MEDIA CAN HELP DRIVE BRAND AWARENESS AND SALES

Social media can be utilised to target a specific audience (and its network of contacts) for a campaign, enabling businesses to build brand and customer awareness in a very effective way, leading to a potential increase in customer interest and sales.

In addition, research in Australia shows that firms spending an above-average proportion of their marketing budget on social media reported a 7 per cent higher sales growth than those which spent the average amount.[9] Social media offers firms an easy and cost-effective way to engage with customers, receive feedback, and capture impressions. See Figure 1 below.

Figure 1: *Business Use of Facebook Apps and Technologies*

78%

of businesses that used Facebook apps and technologies in 2019 used them for paid ads, free marketing, or finding new clients or customers.

76%

of businesses that used Facebook apps and technologies in 2019 reported that the apps were important for finding and reaching target customers.

Research on German manufacturing and service firms suggests that companies using the Facebook app to collect customer feedback are more likely to engage in product innovation.[10] This research also suggests that social media holds the potential for boosting business innovation and that firms are more likely to innovate when they use social media for customer feedback.

In our survey, 77 per cent of firms reported that they actively used feedback from customers, ad campaigns, and other information from Facebook apps and technologies in 2019.[11] Additionally, 56 per cent of those surveyed reported using customer feedback to improve their product offerings.[12]

2.2 SMES ARE IMPORTANT BENEFICIARIES OF SOCIAL MEDIA

Although social media platforms like the Facebook and Instagram apps are available to all firms, SMEs are important beneficiaries because they are key players in the global economy by virtue of their significant contribution to their national economies.

[9] Deloitte (2018)
[10] Bertschek & Kesler (2017)
[11] Please refer to the Methodology Appendix for a description of the survey.
[12] Please refer to the Methodology Appendix for a description of the survey.

Different estimates suggest that SMEs make up between 62 and 70 per cent of global employment.[13] Similar patterns can be found all over the world.[14]

SMEs hold large potential for economic growth, labour opportunities, and prosperity if they can overcome barriers to growth and market entry. As stated by the Organisation for Economic Co-operation and Development (OECD): 'enabling SMEs to adapt and thrive in a more open environment and participate more actively in the digital transformation is essential for boosting economic growth and delivering a more inclusive globalisation.[15]

Research describes how SMEs, despite their essential role in creating jobs, growth, and innovation, receive a disproportionally small share of credit from the financial system.[16] This likely hinders their ability to scale and grow their business.

However, digital technologies like social media can help smaller companies achieve 'big company benefits' online. An example put forth by the OECD is that 'ad servers and Internet search engines and portals allow SMEs to advertise their goods and services even at low advertising budget levels.[17]

In fact, a 2018 study by the Asia Pacific MSME Trade Coalition (AMTC) showed that online marketing reduced estimated marketing costs for manufacturing and service SMEs by 57 per cent.[18]

Furthermore, being socially connected can, to some extent, shorten the distance between two parties. Research indicates that social media can decrease the relevance of geographical distance on social and business relationships.[19]

This is significant because the geographical distance between a seller and a buyer has been proven to be an impediment to trade, a point that we will revisit in greater detail in Chapter 3.

'Online marketing reduced estimated marketing costs for manufacturing and service SMEs by 57 per cent.'

Because of this shortening of the perceived distance between SMEs and consumers, the world is said to have become more 'flat'.[20] This means the amount of capital required to start, grow, or rebuild a business in a given market is reduced, and SMEs can become more competitive in many aspects.

Indeed, the playing field between smaller and larger firms is beginning to level as small firms compete in ways previously available only to large firms.[21]

---

[13] As of 2019, the International Labour Organisation estimates that SMBs, across the 99 countries surveyed, contribute to 62 per cent of total employment, cf. ILO (2019); in the EU, SMBs employ 67 per cent of entire EU employment, while SMBs comprise over 99 per cent of the stock of firms and employ, on average, 70 per cent of the labour markets across OECD countries, cf. OECD dataset: SDBS Structural Business Statistics (ISIC Rev. 4). SMBs, Small to Mid-size Businesses, are another name for SMEs, defined by companies that have fewer than 250 employees.

[14] International Finance Corporation (2017), Asian Development Bank (2019), and U.S. Small Business Administration Office of Advocacy (2018)

[15] OECD (2017a)

[16] Asian Development Bank Institute (2019)

[17] OECD (2010)

[18] Asia Pacific MSME Trade Coalition (AMTC) (2018)

[19] Bailey et al. (2017)

[20] Influential expert Thomas L. Friedman has argued that information and communications technology (ICT) sets the basis to 'flatten the world', cf. Friedman (2005).

[21] ITC (2018)

SMEs are not the only ones who benefit from the market access and operational efficiencies provided by social media. Social media also reduces the barrier to entry for women entrepreneurs, entrepreneurs with less access to education, and SMEs located in remote and inaccessible areas.[22] We will revisit this in Chapter 5.

2.3 FIRMS USING FACEBOOK APPS AND TECHNOLOGIES GROW FASTER THAN FIRMS THAT DO NOT

The possibilities for low-cost marketing, more effective customer reach and interaction, and other business-specific offerings by Facebook apps and technologies are available to all firms. According to the most recent estimates, 160 million businesses use Facebook apps and technologies.[23]

Several studies across different countries and regions have researched how businesses use Facebook apps and technologies to grow. Research on Portuguese SMEs using the Facebook app in their marketing strategy finds the Facebook app to be an important channel for increasing brand awareness and customer loyalty.[24] Increased consumer loyalty can potentially result in improved sales and profits for a firm.

Other research on the effects of Instagram on Canadian businesses finds that among young entrepreneurs using Instagram, 69 per cent report that Instagram helps them to grow their business through increased sales.[25] Finally, research on the use of social media in the Middle East finds that social media is a helpful channel to increase sales.[26]

160 MILLION
businesses use Facebook apps and technologies.

In our survey sampling over 15,000 businesses in 30 countries and regions across six continents in 2019, 80 per cent of firms that used Facebook apps and technologies reported an increase in sales, and 73 per cent of firms that used Facebook apps and technologies reported they were important for them to grow their business.[27]

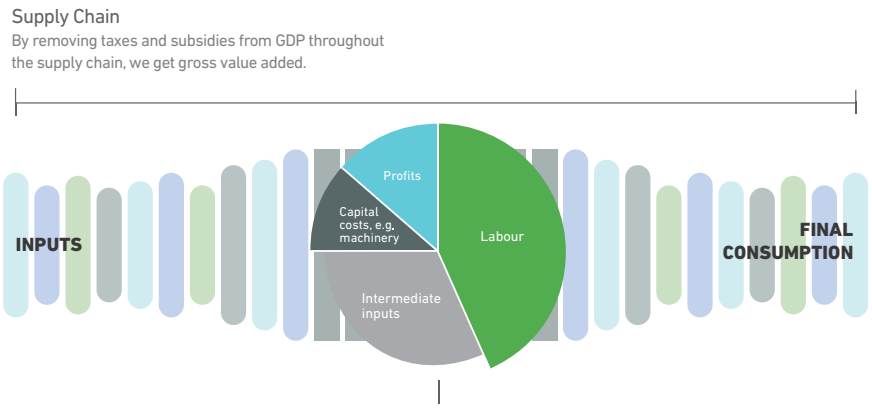
Interestingly, firms using Facebook apps and technologies in our survey reported higher growth than firms not using the platform — in both headcount and revenue. We found that among firms using Facebook apps and technologies last year, 69 per cent and 50 per cent reported growth in revenue and headcounts respectively, compared to 39 per cent and 29 per cent for revenue and headcounts among firms that did not use Facebook apps and technologies.[28]

[22] ITC (2018)
[23] Facebook (2019a)
[24] Nobre & Silva (2014)
[25] Ipsos MORI (2018). 'Online marketing reduced estimated marketing costs for manufacturing and service SMEs by 57 per cent.'
[26] Basri (2016)
[27] Please refer to the Methodology Appendix for a description of the survey.
[28] Please refer to the Methodology Appendix for a description of the survey.

This finding follows existing research from Australia showing that firms on the Facebook app have a higher propensity to export and that sales beyond a business' national home market are strongly associated with sales and revenue growth.[29] We will revisit the topic of exports in Chapter 3.

In an effort to measure the role of Facebook apps and technologies, our quantitative analysis centred on the use of Facebook apps and technologies as a business tool to empower revenue generation activity, which in turn leads to an estimate of gross value added (GVA). GVA is a measure of the private sector contribution to a country's or region's GDP, summing up all the components of value added (less intermediate inputs) that each industry delivers.

FIGURE 2: *Gross Value Added*



Our estimate of the economic impact of Facebook apps and technologies is based on a global survey conducted across 11 industries in 30 countries and regions that asked businesses to estimate the effect of their use of Facebook apps and technologies on their business activities in 2019.[30] The surveyed businesses said that using Facebook apps and technologies helped them generate sales corresponding to an estimated $984 billion (USD) in economic activity[31] last year.

2.4 EXPLORING ECONOMIC ACTIVITY IN THE UNITED STATES

This chapter explores the importance of growth opportunities for businesses across a diverse range of countries, as well as the role of Facebook apps and technologies as tools enabling business growth globally. Across the world, economic conditions, infrastructure, consumer incomes, and markets vary significantly. The evidence in this study confirms the broad value of digital technologies across all the covered countries, including an increased capacity in developing economies to overcome obstacles to business development.

[29] McDaniel & Parks (2019)

[30] Please refer to the Methodology Appendix for a description of the survey.

[31] Economic activity refers to GVA. Exact estimate of GVA is $984,176,035,027 (USD). Please refer to the Methodology Appendix for a description of the survey.

A related question is, to what extent do the digital tools offered by Facebook apps and technologies empower business in the US? The US economy is the largest economy in the world: its GDP grew from $15 trillion (USD) in 2010 to $21.7 trillion (USD) in 2019, corresponding to a yearly growth of over 4 per cent over this period.[32] Thus, we provide a deep dive on the US as a representative of the set of developed economies included in the scope of this global study. As a leading economy, we expect that — even before the advent of Facebook apps and technologies — businesses in the US utilise a variety of tools to inform, market, and communicate. Therefore, this section explores the role of Facebook apps and technologies in contributing to the activities of US firms.[33]

The diffusion of technology across the economy and society has played a prominent role in enhancing the American economy. The Pew Research Center reports that 72 per cent of the American public uses some type of social media to connect with one another for entertainment, news, and information-sharing purposes, up from 5 per cent of American adults in 2005 and half of all Americans in 2011.[34]

Many studies have considered the wider impact conveyed by usage of new technologies by both businesses and consumers. Consumers derive benefits from the use of these free services that researchers have linked to new macroeconomic measures, such as the GDP-B, which quantifies the benefits (welfare contributions) of new and free goods and services. This line of research found that including the welfare gains from Facebook would have added between 0.05 and 0.11 percentage points to GDP-B growth per year in the US. Researchers estimated the US welfare contribution due to Facebook (between 2003 and 2017) at $231 billion (USD) — an average of $16 billion (USD) per year.[35]

Mirroring the benefits accruing to US consumers, US firms embracing digital technologies, including social media, also have seen gains. As is occurring worldwide, US businesses have used new digital technologies to reap the benefits of reduced barriers to growth. In the post-COVID-19 era, we expect US businesses to leverage digital technologies to facilitate their economic recovery. This is not the prerogative of large firms, but also applies to small businesses, who are a key component of the economy. A 2019 Small Business Association report shows that US small businesses created 1.8 million net jobs per year, with firms with fewer than 20 employees adding 1.2 million net jobs.[36] Digital transformation across small businesses is reflected in recent trends. A recent survey of over 500 US small business owners and managers found that 89 per cent invested in marketing, with a larger share (35 per cent) preferring digital to traditional marketing (31 per cent), while 95 per cent of small businesses planned to increase their spending on digital marketing in the next year. In particular, businesses were planning to increase spending on social media (63 per cent), websites (54 per cent), and search engine marketing channels (35 per cent).[37]

[32] U.S. Bureau of Economic Analysis, "Table 1.1.5. Gross Domestic Product", https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey

[33] The reader interested in a related analysis with a scope focused on European countries can access findings from the Copenhagen Economics (2020) study, which is based on the same methodology.

[34] Pew Research Center (2019)

[35] Brynjolfsson, E., Collis, A., Diewert, W. E., Eggers, F., & Fox, K. J. (2019). GDP-B: Accounting for the value of new and free goods in the digital economy (No. w25695). National Bureau of Economic Research

[36] U.S. Small Business Administration Office of Advocacy (2019)

[37] The Manifest (2019)

Consistent with these findings, our survey confirmed that a broad set of US businesses have adopted digital tools, such as Facebook apps and technologies, to reduce barriers to growth. For example, the advent of digital advertising has opened new opportunities for low-cost marketing and targeting for American businesses. Our survey found that 56 per cent of businesses that used Facebook apps and technologies last year reported that they were important to lowering the costs of marketing.

American businesses are also seeking innovative marketing solutions to expand their customer bases and enter new local or national markets. In our survey, 63 per cent of businesses that used Facebook apps and technologies in 2019 reported that they were important to finding and reaching target customers.

The growth of the US economy both enhances opportunity and increases competition as markets mature. Facebook apps and technologies provide an advantage as firms seek to capture new markets and succeed in a more competitive landscape. In fact, 58 per cent of businesses that used Facebook apps and technologies reported that they were important to competing against other businesses in the market last year.

All of the above has a positive impact on revenue generation. In fact, 60 per cent of US businesses that used Facebook apps and technologies in 2019 reported that they were important in growing their business revenue. This suggests that Facebook apps and technologies can help businesses grow, as evidenced by the fact that surveyed businesses across the US that used Facebook apps and technologies reported higher growth rates than businesses not using Facebook apps and technologies.

As a result, it is unsurprising that surveyed businesses across the US that used Facebook apps and technologies said that using them has helped generate sales corresponding to an estimated $107 billion (USD) in economic activity last year.[38] This economic contribution is calculated on a per-year basis, based on responses provided by the US firms surveyed as part of the global study. As this chapter shows, the US case is one of many instances of growth supported by innovative digital tools, such as Facebook apps and technologies.

[38] Economic activity refers to gross value added (GVA) over the past 12 months. Exact estimate of GVA is $107,160,722,936 (USD). Please refer to the Methodology Appendix for a description of the survey.

2.5 SUMMING UP

In this chapter, we identified how digital technologies help SMEs and entrepreneurs of all skill levels and backgrounds improve their chances of success and facilitate business recovery by opening up new opportunities in the marketplace. Businesses achieve these benefits by using digital technology and apps to reduce the cost of advertising, increase sales potential, and improve access to information and a wider pool of customers. Business owners who used Facebook apps and technologies in 2019 reported greater growth, were more willing to export, and were faster to innovate based on customer feedback.

These strategies and the adoption of digital technologies allow businesses to contribute significantly to the economy. This is confirmed in our analysis, both at the level of the 30 countries and regions surveyed and in the US economy.

C
BUSINESSE

CHAPTER III:

ONNECTING ES GLOBALLY

Global prosperity increasing through specialisation and trade is a long-standing cornerstone of economic theory.[1]

Today, trade is not limited to the interaction and relationship between two people in physical proximity — instead, it often takes place across long distances and international borders. Through trade, people are able to specialise by producing those goods and services in which they have a 'comparative advantage'. Trade can increase efficiency and can manifest itself as a means to create more competitive prices for consumers and higher margins for producers. Trade is, therefore, a mutually beneficial transaction.

The term 'exports' describes the sales of goods or services produced in one country or region that are bought (imported) by buyers in another country or region. Exports are a way for firms to increase sales beyond their national borders.[2] Today, exports to other markets have become easier due to wider adoption of digital tools and e-commerce.

Yet, the underlying 'home market' barriers to growth and recovery, as discussed in Chapter 2 — including the cost of marketing, the cost of getting customer feedback, and barriers to raising finance — are fundamentally the same when selling abroad. Firms looking to grow their business across borders also face barriers related to setting up a business abroad, including brand recognition, customer reach, costs of trade (shipping, language, or regulatory barriers), and financial restrictions.

In this chapter, we explore how digital technologies offer ways for firms to overcome barriers in order to enter markets abroad and to counter the influence of distance on export volumes (3.1). We then zoom in on SMEs and why they specifically benefit from digital technologies within the area of international trade (3.2). Thereafter, we highlight how firms use social media as an important digital tool to grow an exporting business. We use our global survey of businesses and estimate the impact of firms' use of Facebook apps and technologies on global export volumes (3.3).[3] An assessment of the US case study (3.4) and a conclusion follow (3.5).

[1] Economic theory on comparative advantages describes the rationale of trade between countries and regions. The theory of comparative advantages was formulated by David Ricardo in 1817.

[2] McDaniel & Parks (2019)

[3] Please refer to the Methodology Appendix for a description of the survey.

3.1 DIGITAL TECHNOLOGY HELPS FIRMS ACCESS MARKETS ABROAD

Trade over large distances is typically more difficult to facilitate than trade happening between buyers and sellers who are located in closer physical proximity.[4]

Digital technology and digital platforms have changed the economics of doing business across international borders. Technology has **made it easier for firms to access and create markets**, providing firms with a larger base of potential customers and effective ways to reach them.

In 2016, researchers found that digital technology contributed to lowering the cost of international interactions and transactions, making it easier for firms to communicate with customers abroad, **reducing trade costs**.[5]

With the increasing success of e-commerce, additional research also finds that digital marketing has greatly **reduced the capital requirement for businesses to expand into foreign markets**. For example, with e-commerce, brands are often built and maintained via an online platform with all distribution facilitated by international deliveries. This reduces, and potentially eliminates, the need for opening and operating physical stores abroad. This, in turn, increases firms' ability to reach new markets, not only through a reduction of trade costs but also through a reduction of risk, as fewer physical investments are needed.[6]

'Social media, as a significant digital technology, has also been found to enable international trade by making it easier to reach new customers located abroad.'

Digital technologies can create new ways to structure an export business. They also create the potential to boost firms' international sales by **reducing the perceived distance between sellers and buyers**.[7] In 2015, the European Commission published a study showing that the effect of distance is less significant in the trade of online services.[8] A similar result has been found for the digital platform eBay. In 2012, the negative effect of geographical distance on global trade was found to be 65 per cent lower than for businesses trading offline across 62 countries.[9]

Social media, as a significant digital technology, has also been found to enable international trade by making it easier to reach new customers located abroad.[10]

3.2 SOCIAL MEDIA: AN IMPORTANT ENABLER OF SME TRADE

SMEs tend to be less engaged in trade than larger firms due to information barriers, financial restrictions, and other market barriers.[11] The OECD estimated in 2018 that more than 90 per cent of large manufacturing firms export, but only 10 to 25 per

[4] Baldwin & Taglioni (2007) developed an adapted version of the so-called 'Gravity Equation', a standard economic tool for analysing international trade.
[5] McKinsey & Company (2016)
[6] McKinsey & Company (2016)
[7] Chaney (2013)
[8] Alaveras & Martens (2015)
[9] Lendle et al. (2012)
[10] See e.g. Ipsos MORI (2018)
[11] OECD (2018) & McDaniel & Parks (2019)

cent of SMEs across most OECD countries do.[12] Our survey of businesses across 30 countries and regions around the globe provides similar suggestive evidence — 55 per cent of large firms surveyed exported last year, compared to only 34 per cent of SMEs.[13]

Although the ways in which digital technologies — and social media in particular — can reduce barriers to trade for both large and small firms are clear, social media has been found to be particularly powerful for SMEs. In 2018, the ITC found that improvements in access to information on export opportunities had considerably more significance for SMEs than for large firms.[14]

The World Trade Organisation (WTO) finds the potential decline in trade costs due to increased technology use to be a 'disproportionately larger benefit to MSMEs [Micro, Small, and Medium Enterprises] and firms in developing countries', and also finds the potential of technology in facilitating international trade to be highest in poor countries with weak institutions.[15] This is further supported by a WTO paper analysing SMEs' participation in global value chains from 2016 to 2017 across 111 developing and middle-income countries, which finds that digitally-connected SMEs in developing countries tend to import a higher share of their inputs than nondigitally-connected firms.[16]

As previously noted, digital technologies have reduced the perceived distance between buyers and sellers. This also holds true for social media. Specifically, it has been shown that regions that are more socially connected have higher trade flows, even after controlling for geographic distance and the similarity of regions, along with other economic and demographic measures.[17]

3.3 FIRMS ENGAGED IN FREQUENT TRADE USE FACEBOOK APPS AND TECHNOLOGIES

Firms use social media to build their brands, manage customer relations, increase sales in internal markets, and more. For many firms, it is important to have access to new markets and engage in international trade in order to grow. In our survey of businesses across 30 countries and regions, we found a higher propensity to export for businesses that reported that they used Facebook apps and technologies (44 per cent) last year compared to businesses that did not use Facebook apps and technologies (26 per cent), suggesting that businesses that used digital technologies were more likely to export.[18]

[12] OECD (2018)
[13] OECD (2018)
[14] Please refer to the Methodology Appendix for a description of the survey.
[15] ITC (2018) found that more than 60 per cent of SME responses in a survey carried out by ITC for Fifth Global Review of Aid for Trade in 2015 indicated significant importance from improved access to information on export opportunities compared to a little over 40 per cent for large firms.
[16] WTO (2018)
[17] Lanz et al. (2018)
[18] Bailey et al. (2017)

FIGURE 3: *Market Expansion and the Importance of Facebook Apps and Technologies*

Business users agreed that Facebooks apps and technologies would be an important tool for market expansion in the coming year.

Among firms that reported to be exporters in 2019, those located in middle-income countries and regions[19] were more likely to view Facebook apps and technologies as important for supporting trade than those in high-income countries and regions.[20] For example, 86 per cent of firms located in middle-income countries and regions said that Facebook apps and technologies were important for them to expand into new markets.[21] These shares were considerably higher than the shares reported by firms in high-income countries and regions (68 per cent).[22]

$342 BILLION

Surveyed businesses across 30 countries and regions said that using Facebook apps and technologies helped them generate international sales corresponding to an estimated $342 billion (USD) in exports last year.

That said, a 2019 study on the impact of Facebook in the Nordic countries shows that SMEs in high-income countries benefit from online intermediaries like Facebook as it reduces trade costs, helping SMEs to achieve advantages that were previously reserved for larger companies.[23]

All respondents to the survey have assessed to what extent they credit their international sales to Facebook apps and technologies, measured in USD. Aggregating these answers across export types (goods and services, respectively, as industry level data is not available) yielded for each country/region an estimated attribution for international sales in the sample. This sample estimate was scaled up to a national level using a scaling factor, which was then aggregated across the 30 countries and regions. This corresponded to an estimated $342 billion (USD) worth of goods and services exported from 30 countries and regions last year.[24]

[19] According to the World Bank, middle-income countries (MICs) are defined as economies with a Gross National Income (GNI) per capita between $1,026 (USD) and $12,475 (USD).

[20] Please refer to the Methodology Appendix for a description of the survey.

[21] Please refer to the Methodology Appendix for a description of the survey.

[22] Please refer to the Methodology Appendix for a description of the survey.

[23] Copenhagen Economics (2019)

[24] Exact export estimate is $342,339,388,179 (USD). Please refer to the Methodology Appendix for a description of the survey.

3.4 EXPLORING THE ROLE OF EXPORTS IN THE UNITED STATES

The US has the third largest export economy in the world and sold $1.25 trillion (USD) worth of goods and services to trading partners in 2017. Its economy utilises exports to sustain growth and employment. As of 2017, about 39 million American jobs depended on trade, a key to the development of many sectors of the economy.[25] In particular, exports of manufactured goods directly or indirectly supported over 6 million US jobs, about half of all manufacturing employment.[26]

Digital technologies play a key role in facilitating US exports. At the start of the 2010s, the effects of digital trade on productivity and lower cost of trade (domestic and international) increased US real GDP by $517–$710 billion (USD) (3.4–4.8 per cent) and increased US aggregate employment by up to 2.4 million jobs per year.[27] Statistics from 2019 showed that small businesses exported $541 billion (USD), which in turn supported about 6 million US jobs.[28] At the same time, small businesses continue to face several barriers to exporting.

Even in a country like the US, with a large domestic market and relatively well-developed export market channels, digital technologies enhance trade, even if to a lesser extent than in smaller or less developed countries. Digital technologies can empower US businesses — regardless of size — to overcome barriers to trade. Recent studies show that online tools dispel or mitigate structural barriers, such as (i) distance and transportation costs, (ii) communication and translation costs, and (iii) lack of trust and information.[29] A survey of nearly 4,000 businesses across the US found that small businesses that were located in rural US areas and used digital tools exported as much as businesses located on the coasts or in urban areas.[30]

Facebook apps and technologies are amongst many digital tools available to businesses that can facilitate trade by mitigating barriers to exporting. A 2019 analysis of the Future of Business Survey — conducted jointly by the Facebook company, the OECD, and the World Bank — confirms this. It finds that, similar to businesses globally, US businesses on Facebook have a higher propensity to export: about 7 per cent, compared to about 4 per cent for US firms of all industries and sizes.[31]

Consistent with this study, our surveyed American businesses that used Facebook apps and technologies last year reported a higher propensity to export, compared to businesses that did not use Facebook apps and technologies. This suggests that US businesses that used digital technologies were more likely to export. This established correlation shows the importance of the trade-enabling channels opened up by Facebook apps and technologies for US businesses.

Our survey further confirmed the key role of the export opportunity for US businesses via social media. In fact, 56 per cent of surveyed businesses in the US that used Facebook apps and technologies last year reported that they were important to enabling entry into new markets.

[25] Trade Partnership Worldwide (2019)

[26] U.S. Department of Commerce, International Trade Administration (2015), and U.S. Chamber of Commerce

[27] U.S. International Trade Commission (2014)

[28] U.S. Chamber of Commerce Technology Engagement Center and Google (2019)

[29] Paypal (2018)

[30] Ibidem

[31] With the exception of the largest firms; see McDaniel & Parks (2019)

US businesses within our survey reported the extent to which they attributed their international sales to Facebook apps and technologies. Aggregating these answers across export types (goods and services), we scaled this sample estimate up to the US national level. From this process, we found that surveyed businesses across the US that used Facebook apps and technologies in 2019 said that using them helped generate international sales corresponding to an estimated $9 billion (USD) in exports last year.[32]

3.5 SUMMING UP

In this chapter, we examined how digital technologies can be a key enabler for firms to overcome barriers to trade. We find that digital technologies can help firms reach new markets by reducing both the costs of trade and the capital requirements for businesses that wish to engage in exports. They can also help businesses as they seek to reach or retain markets during the period of economic rebuilding that will follow the COVID-19 pandemic.

We also find that digital technologies, including social media, are powerful tools in reducing the perceived distance between sellers and buyers. This serves to counter the potential effects of distance, which historically has restricted trade volumes. As a result, across the world, the surveyed businesses report that Facebook apps and technologies are valuable tools to expand their export opportunities.

[32] Exact export estimate is $9,165,947,507 (USD). Please refer to the Methodology Appendix for a description of the survey.


CO
JO

CHAPTER IV:

ONNECTING OB SEEKERS

When businesses are growing, employment opportunities expand for those seeking new jobs. The reverse is true when businesses experience a slowing of growth. Due to widespread digitalisation and internet access, job portals, professional networks, and social media play increasingly essential roles in the hiring process.

In this chapter, we will discuss how digital technology can **reduce hiring costs** and improve matchmaking between firms and employees (4.1). We will then outline how social media can be used for hiring both informally and formally (4.2). Finally, we review evidence from the US (4.3) and conclude with an overview of the chapter (4.4).

4.1 DIGITAL TECHNOLOGY PLAYS A KEY ROLE IN HIRING

When a business owner or staffing manager decides to hire additional staff, digital technology has the potential to reduce hiring costs by offering cost-efficient ways to post jobs and manage the hiring process. These advantages will be essential in the post-COVID-19 economy, as businesses begin to rebuild their workforces and, in turn, individuals who were forced to leave positions of employment seek to re-enter the job market.

Digital technologies can also potentially **open up new and larger job markets** (e.g. national and international job portals and networks). A study reviewing available literature related to online recruitment found online recruitment via job portals to be up to 70 per cent faster and 90 per cent cheaper than 'traditional' recruitment tools, e.g. newspapers.[1]

Additional research on the effect of digital technologies on labour markets finds that the adoption of digital technologies in the hiring process could reduce costs in talent and human resources by 7 per cent at the country level.[2]

Online job recruitment is

70%

faster and

90%

cheaper than 'traditional' recruitment tools.

[1] Ramaabaanu & Saranya (2014)
[2] McKinsey & Company (2015b)

Digital technology also **facilitates better matches between employers and employees** by bridging the job search gap, with job candidates having improved access to open positions, specific job descriptions, and greater knowledge of the employer.[3] Concurrently, employers also have more access to information about potential candidates through digital sources.[4]

By using digital technology in the recruitment process, job portals like Monster and Jobcase can **reach a larger pool of potential candidates at a lower cost**. This can also benefit companies in a rebuilding phase, allowing them to grow their staff without incurring excessive expenses related to hiring. Jobcase reports to have more than 100 million users, and many similar job portals exist around the world.[5]

'Digital technologies can also help open new markets for employment.'

Positions posted to online job portals have the ability to reach more potential candidates than traditional, non-digital hiring tools. Digital technologies can also help **open new markets for employment**. For example, Amazon Mechanical Turk (MTurk) matches micro-jobs — tasks that do not require specific skills but can be done using a basic computer and an internet connection, such as transcribing, research, and completing surveys — with people who will do these tasks.[6]

Previously, these tasks had to be solved by existing staff who were potentially overly qualified and hence more expensive. MTurk is an example of how digital technology can help businesses 'crowdsource' small tasks to individuals working for a few hours in different time zones, potentially overnight, without going through a formal hiring process. For the individual, these micro-jobs can be a way to supplement an existing income, work from home, or earn money in a flexible way.

4.2 SOCIAL MEDIA PROVIDES BOTH FORMAL AND INFORMAL WAYS TO SEARCH FOR AND INTERACT WITH CANDIDATES

In addition to job portals and professional networks, social networks like LinkedIn, Facebook, and Twitter can help bridge information gaps on both sides of the labour market. Social networks can be used to share jobs informally via users' posts and sharing of content, as well as formally by firms posting job ads. For example, a user could informally share a post with their social network about a part-time opening at their workplace and invite their network to apply or further share the job opportunity.

Social media functions as an extension of traditional in-person relationships.[7] Research using Facebook apps and technologies data from 55 countries indicates that having a large network increases the chance of getting a job at a company where

[3] McKinsey & Company (2015b)

[4] See e.g. Vicknair et al. (2010) on the use of social networking websites as a recruitment tool for employers.

[5] Jobcase (2019)

[6] Amazon Mechanical Turk (2019)

[7] Harvard Business Review (2018, September 25)

a social connection is currently employed. The likelihood further increases the more connections a person has and if the connection is closer (so-called 'strong ties').[8]

Social media is also changing the way businesses informally communicate and interview candidates. For example, some recruiters note the benefits of using WhatsApp as an alternative to email or phone calls, as messaging is instant, discreet, and different from other media typically used by recruiters and employers. In order to attract a pool of high-demand candidates, the use of WhatsApp may be a way for an employer to stand out and gain the attention of the candidate. Once interest is shown, an interview can take place directly in the app via voice or video.[9]

More formally, businesses can also advertise job openings on social media with a paid ad that can be targeted to specific audiences and potential candidates based on geography, education, or other key criteria for the job.[10]

'Social media functions as an extension of traditional in-person relationships.'

In our survey of businesses, 29 per cent of firms that used Facebook apps and technologies last year said they used them for hiring.[11]

Additionally, firms may also create a free company page on the Facebook app or LinkedIn, where potential candidates can follow news about the firm. According to LinkedIn, 25 million companies worldwide had a company page on its platform in 2018.[12]

LinkedIn is one social media platform designed and labelled as a professional network to use for hiring. However, other social media platforms also feature designated hiring tools. One such example is the Jobs on Facebook tool, which enables firms to advertise job openings on the Facebook app. The tool links the functionalities of an online job portal and social media accounts, allowing potential candidates to apply for jobs quickly by sharing the pre-existing background and contact information from their social media profile.

As we discussed in the preceding chapters, digital tools can help firms overcome barriers to growth and boost sales. For some businesses, sales growth created by digital tools requires them to increase their production capacity, which may require hiring more staff to meet demand.

In our survey, we found that businesses that used Facebook apps and technologies last year reported higher headcount growth than businesses not using Facebook apps and technologies.[13] This suggests a link between sales enabled by digital technology and job opportunities in businesses and sectors that are positively affected by digital technology.[14]

[8] Gee et al. (2017)

[9] Workable (2018, October 24), Rao (2016, February 7)

[10] See e.g. Facebook (2019b), LinkedIn (2019), Twitter (2019)

[11] Please refer to the Methodology Appendix for a description of the survey.

[12] LinkedIn (2018, October 11)

[13] Please refer to the Methodology Appendix for a description of the survey.

[14] In this report, we do not account for displacement effects, meaning, jobs that may cease to exist when old business models give way to new ones due to the emergence of new technologies, such as the internet, e-commerce, or social media.

Moreover, 61 per cent of firms that used Facebook apps and technologies in 2019 found the apps to be important tools in creating jobs in local communities, with a tendency for more firms in middle-income countries and regions to think of this as important than firms in high-income countries and regions.[15]

4.3 EXPLORING JOBS IN THE UNITED STATES

As we've documented globally, digital technologies benefit businesses and workers by facilitating matching processes between jobs and job seekers and by driving growth that increases demand for employees. In the US, labour mobility, the ability of workers to relocate for work, has historically been higher than in other developed countries, a factor that helps businesses optimise growth and increases the employment options available to individuals. This mobility may become even more important after COVID-19, as individuals seek to re-enter the workforce and, in some cases, to pivot their previous professional objectives. Flexible housing and labour market regulations, together with a culture built through immigration, contribute to the comparatively greater labour mobility within the US. For the period 2000-2010, three times as many Americans moved to find jobs than Europeans.[16, 17]

The flexibility of the US labour market is also reflected in a greater sensitivity to business-cycle volatility. While contractions in the labour market following the 2008 financial crisis were significantly stronger in the US compared to the OECD average, labour market conditions also improved faster in the US than in many other advanced economies. By 2019, US employment had reached 160 million, exceeding its pre-crisis level in 2007, with the unemployment rate at an all-time low of 3.6 per cent (January 2020) against an average across all OECD countries of 5.2 per cent (July 2019).

61%

of surveyed firms using Facebook apps and technologies reported they were important to creating jobs in their local communities.

Digital technologies are powerful tools in the recruitment process of US firms. Digital tools and apps, such as LinkedIn and Monster, as well as the Jobs on Facebook tool, increase firms' access to talented workers. Indeed, several US studies have found that online recruitment boosts workers' mobility and employer-to-employer worker flow. Digital tools allow for precise, efficient search and screening mechanisms, minimising recruitment barriers and making it possible for businesses to hire more quickly and less expensively.[18] Better and faster matching of workers with the right firms reduces involuntary unemployment[19] and leads to higher wages from improved productivity.[20] A recent study found empirical evidence for a positive connection between social media connectedness and start-up performance in the US.[21]

[15] Please refer to the Methodology Appendix for a description of the survey.

[16] Iwulska (2011)

[17] Federal Reserve Bank of St. Louis (2020), U.S. Bureau of Labor Statistics (2020), OECD (2019a)

[18] Freeman (2002)

[19] Kuhn & Skuterud (2004)

[20] Bagues & Sylos Labini (2009)

[21] Banerji & Reimer (2019)

The share of US firms using social networks to screen potential employees has increased rapidly in recent years, from only 11 per cent in 2006 to 45 per cent in 2009 and 70 per cent in 2017.[22] Today, LinkedIn has almost 170 million members in the US alone.[23]

Within this broader trend of positive impacts on the US labour market due to the adoption of digital tools, this study confirms the positive effects of Facebook apps and technologies from a business perspective. In our survey, 31 per cent of American firms that used Facebook apps and technologies last year stated that they used them for hiring.

In addition to enabling efficient matching and hiring processes, digital technologies can also provide a direct contribution to growth for firms using these tools, which in turn drives demand for hiring. Our survey for the US found that 51 per cent of American businesses that used Facebook apps and technologies reported headcount growth, compared to 23 per cent of businesses not using Facebook apps and technologies. This indicates that for businesses leveraging digital technologies, a positive association existed between revenue growth and headcount growth. As a result, local employment depends on business use of the latest digital technologies, a relationship confirmed by the 52 per cent of surveyed firms that used Facebook apps and technologies in 2019 and reported that they were important to creating jobs in their local communities.

4.4 SUMMING UP

Throughout this chapter, we have explored firms' use of digital technology in hiring and how digitalisation can be an indirect driver of job opportunities arising from business growth. We have reviewed these patterns across economies of different shapes and sizes and can report a picture of valuable contribution to job opportunities arising from firms' use of digital technologies.

We find that technologies such as job platforms, professional networks, and social media play an important role in reducing hiring costs, expanding the pool of potential candidates, and enabling better matching between employers and potential candidates by improving access to information on both sides. Around the world, businesses said that they used Facebook apps and technologies for hiring and relied on those tools to achieve the growth that powers jobs and economic activity in local communities.

[22] Careerbuilder.com (2009; 2017)
[23] LinkedIn (2020)

SUPPO
BU

CHAPTER V:

RTING ALL USINESSES

Economic inclusion — the availability of and involvement in economic opportunities for all people, regardless of gender, ethnicity, education, or socio-economic background — is important to economic growth. The UN's Sustainable Development Goals (SDGs) prioritise inclusion throughout many of their goals: namely, inclusive, and quality education for all (Goal 4); gender equality (Goal 5); and sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all (Goal 8).[1]

Furthermore, inclusion has been shown to help promote innovation, cohesion, and public health, as well as increase economic growth and production of goods and services.[2] Inclusion offers the potential to unlock growth and spur economic recovery by empowering all to contribute innovative ideas about business opportunities.

Economics Nobel Laureate Amartya Sen argues that development necessitates a set of interconnected freedoms. Beyond political freedoms, these include freedom of opportunity and economic protection from poverty.[3] Economic choices play a key role in development across and within societies, which implies both the freedom and opportunity to buy products and find services as well as the freedom and opportunity to secure different types of work.

This chapter discusses how digital technologies can support inclusion. We begin with an overview of the role of inclusion in driving economic and social progress (5.1). We then discuss how economic inclusion is promoted through these technologies (5.2). This is followed by a discussion of the inclusion of women,

'Inclusion offers the potential to unlock growth and spur economic recovery by empowering all to contribute innovative ideas about business opportunities.'

[1] UN (2019)
[2] Deloitte (2019)
[3] Sen (1999)

given the disadvantages they often still face in the business world. Afterwards, we analyse new evidence that shows how social media helps to overcome these barriers (5.3).[4] In conclusion, we review the US case study (5.4) and summarise the chapter's findings (5.5).

5.1 THE ROLE OF INCLUSION IN ECONOMIC AND SOCIAL PROGRESS

3 to 5%

GDP value associated with an inclusion gap for people with disabilities in 10 low- to middle-income countries.

In many regions around the world, inclusion is still a major issue in traditional business environments. In 2018, the World Bank concluded: 'women continue to face widespread barriers, entrenched in laws that keep them out of jobs and prevent them from owning a business by restricting their access to credit or control over marital property.'[5] In a study on equal opportunities and barriers to inclusion for individuals of different races, genders, and geographic and income backgrounds in the US, the Brookings Institute finds that such barriers can emerge from factors beyond the control of the individual.[6] Uncontrollable factors include distance, educational opportunities, and a diverse array of other socio-economic factors.[7] Barriers can also emerge simply through economic start-up costs that prevent an individual's full engagement with economic processes.[8]

Similarly, data for a wide range of countries and regions in the Future of Business Survey shows that:

- In many countries and regions, disproportionately fewer women-run businesses exist. Shares of mainly women-run businesses range from 5 to 43 per cent, while businesses mainly run by men range from 31 to 77 per cent.[9]
- Women-run firms are also smaller — 68 per cent of women-run businesses are sole proprietorships, compared to 49 per cent of businesses run by men.[10]

Enhancing inclusion is not just critical for those historically excluded from opportunity, but it also has the potential to benefit the entire economy significantly, as measured for several groups and regions around the world. One study noted the financial ramifications of inclusion challenges for people with disabilities in 10 low- to middle-income countries, with an estimated GDP value associated with an inclusion gap as equivalent to 3 to 5 per cent of the GDP.[11] Similarly, additional research estimates that greater gender equality in Australia could add an additional $5 billion (AUD) a year to GDP.[12] It makes economic sense to encourage economic inclusion.

[4] Please refer to the Methodology Appendix for a description of the survey.
[5] World Bank (2018, March 29)
[6] Brookings Institute (2017)
[7] Brookings Institute (2017)
[8] Center for International Private Enterprise (2015)
[9] Facebook, OECD, and the World Bank (2017)
[10] Facebook, OECD, and the World Bank (2017)
[11] ILO (2009)
[12] Deloitte (2019)

5.2 TECHNOLOGY PROVIDES OPPORTUNITIES FOR HISTORICALLY MARGINALISED GROUPS AND GEOGRAPHIES

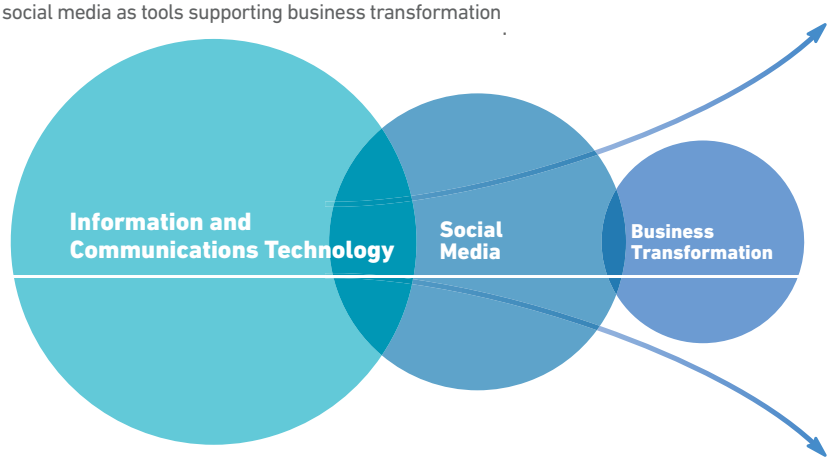
Digital technologies and social media empower and engage marginalised groups around the world, promoting economic inclusion in the digital age. Reports from the United Arab Emirates and Indonesia find, respectively, that women are increasingly using social media as a tool for empowerment and as a way to engage in entrepreneurial ventures.[13, 14] Women-run businesses achieve success using online tools for a broader range of purposes than businesses run by men.[15]

Research on supporting migrant entrepreneurship finds that social media allows many minority entrepreneurs to establish localised brand recognition at a very low cost.[16] An additional study from the Philippines on the inclusion of the elderly through social media reports that access to social media is an increasingly important avenue through which to pursue social inclusion.[17] Research affirms that increasing availability and use of digital tools, such as social media, are acting as economic enablers for groups that historically have faced significant economic hurdles.[18]

Social media, together with a broader set of digital tools, empowers a process of transformation of businesses and economies. See Figure 4 below.

FIGURE 4: *Tools Supporting Business Transformation*

Figurative progression from information and communications technology (ICT) to social media as tools supporting business transformation



Expanding access to connectivity, and thus the availability of all online tools (including digital platforms), to remote and rural areas is essential. A recent study of digital developments worldwide confirmed this finding: rural and remote areas have the least access to digital and technological infrastructure and are also the areas with the greatest need for digital connectivity.[19] A 2018 study identified infrastructural divides

[13] Mourtada & Salem (2012)
[14] Melissa et al. (2015)
[15] Facebook, OECD, and the World Bank (2017; 2018)
[16] JIIP and VVA (2016)
[17] Celeste & Suarez (2017)
[18] JIIP and VVA (2016), Celeste & Suarez (2017)
[19] Salemink et al. (2017)

in Europe and the EU's internal market policies as barriers to creating truly inclusive growth and greater prosperity, respectively.[20]

As a result, improved broadband connectivity has become a defining feature of rural connectivity, as observed in a variety of locations, from the UK[21] to Australia[22] to Kenya.[23] Reports from 2018 describe mobile money as vital for both the private and public sectors in many central African countries. For example, the Kenyan Government's eCitizen platform receives 90 per cent of its digital payments via mobile money — with the effect of encouraging the growth of SMEs in rural areas.[24] The benefits of market access and operational efficiencies provided by digital platforms can encourage the participation of groups such as SMEs located in remote areas all over the world.

When examining social media specifically, there is evidence to suggest that rural regions are benefitting in new ways from social media marketing compared to traditional marketing. A 2017 study looking at small rural businesses in the tourism sector of Greece found that social media provides added benefits when attracting younger millennials, as it allows businesses to expand on in-person introductions with ongoing relationships online.[25]

The Facebook app and other social media tools are recognised in a 2019 briefing paper on digital technologies in agriculture and rural areas by the UN's Food and Agriculture Organization as playing a vital role in facilitating cost-effective social and business interactions.[26] Digital technology generally, and social media specifically, are potential enablers of greater inclusion of businesses in rural and remote areas.

5.3 WOMEN BUSINESS LEADERS ACROSS THE WORLD USE AND VALUE FACEBOOK APPS AND TECHNOLOGIES

Reports on inclusion in the workplace by the World Bank suggest that women often both face the burden of cultural expectations and lack other assets and skills, such as educational attainment or access to trade networks. This hinders the economic opportunities available to women. For example, African women working to produce exportable goods and services are typically less able than men to get the inputs and materials that would raise their productivity and allow them to compete better in overseas markets.[27] The magnitude of these barriers is found to be exacerbated in many places around the world due to women also having less access to the education and financing required to start a business.[28] Consequently, in a study of women in

[20] Bertelsmann Stiftung (2019)
[21] Townsend et al. (2015)
[22] The Cairns Institute (2019)
[23] Kizza (2012)
[24] GSMA (2018), GSMA (2017), Nyaga & Okonga (2014)
[25] Chatzigeorgiou (2017)
[26] Food and Agriculture Organization of the United Nations (2019)
[27] World Bank (2014), McKinsey & Company and Leanin.org (2018)
[28] International Labour Organization (2016)

the workplace, women are found to be underrepresented in the business community and as entrepreneurs.[29] In our survey of businesses across countries and regions, we found that only a small fraction of the businesses were founded by women.[30] At the same time, the proportion of businesses that were founded by women was higher among those that used Facebook apps and technologies last year compared to businesses that did not.[31]

In the Future of Business Survey, businesses run by women use digital tools to a higher degree (compared to those run by men) for six out of seven categories of business purposes.[32] Access to these tools may help level the playing field for all businesses by minimising or eliminating the need to invest in substantial resources or be limited by cultural norms. The evidence from respondents to our survey of 30 countries and regions reaffirms this conclusion; women-founded firms that used Facebook apps and technologies last year reported more often (compared to firms founded by men) that Facebook apps and technologies were important tools for starting their businesses, overcoming business challenges, growing revenue, and creating jobs in their local community.[33]

5.4 EXPLORING INCLUSION IN THE UNITED STATES

The US workforce is extremely diverse, with 37.4 per cent of workers identifying as a minority.[34] Women make up 47 per cent of the workforce and lead men in terms of educational attainment, with over 33 per cent of women having at least a bachelor's degree.[35] Regardless, there are significant barriers for women and minorities to entrepreneurship opportunities in general and to leadership positions across firms of all sizes.

Across the economy, women's self-employment rate has historically been at about half the level of men. Women own 36 per cent of all businesses (20 per cent of businesses that employ at least one worker), accounting for only 12 per cent of business revenue and 15 per cent of employment. In fact, according to the U.S. Census Bureau Survey of Business Owners, only 10 per cent of women-owned businesses employ workers (compared to 22 per cent of men-owned businesses), and they have a smaller average number of employees and payroll level per employee than their male counterparts.[36] Further, US women- and minority-owned businesses' revenues are on average considerably smaller than those of white- or men-owned firms, according to a Pew Research Center 2015 analysis.[37]

[29] McKinsey & Company and Leanin.org (2018)

[30] Please refer to the Methodology Appendix for a description of the survey.

[31] Please refer to the Methodology Appendix for a description of the survey.

[32] Facebook, OECD, and the World Bank (2017; 2018)

[33] Please refer to the Methodology Appendix for a description of the survey.

[34] Civilian Labor Force info, as stated in U.S. Office of Personnel Management (2017), sourced from the Bureau of Labor Statistics' (BLS) Current Population Survey (CPS)

[35] Ryan and Bauman (2015)

[36] As stated in U.S. Small Business Administration (2017)

[37] Pew Research Center (2015)

At top US firms, women and minorities are also underrepresented in leadership positions. In fact, in 2018, women and minorities held only 34 per cent of the Fortune 500's board seats.[38] At the start of 2019, only 24 of the Fortune 500 CEOs were women.[39]

Yet, several studies have shown that inclusion of women and minorities in the workforce is important for US economic growth. Companies in the top quartile for gender diversity on their executive teams were 21 per cent more likely to have above average profitability than companies in the bottom quartile, according to a 2018 study of over 300 companies (mainly in the US and UK). Amongst the same set of firms, those in the top quartile for ethnic and cultural diversity on executive teams were 33 per cent more likely to achieve industry-leading profitability.[40]

Greater inclusion in business activity at the firm level would translate into macro-level changes enhancing both local and national economic activity. According to a recent study, if the US female labour force participation grew to match that of men (including part- versus full-time work) and occupational choices enabled women to work in the same mix of sectors as men (which reflects higher productivity industries), US annual GDP would increase by $4.3 trillion per year in 2025. Even in a scenario where the gender gap was narrowed, this corresponds to every US state and city adding at least 5 per cent to their GDP in that period by furthering women's economic potential (with half of US states potentially adding more than 10 per cent).

69%

of women-founded businesses stated that Facebook apps and technologies were important to growing their business revenue.

Digital technologies, such as Facebook apps and technologies, are important tools of empowerment for women and minorities. In particular, our survey reflected the importance of Facebook apps and technologies to female entrepreneurs. In the US, similar to the results across all 30 surveyed countries and regions, the proportion of women-founded firms was larger amongst businesses that used Facebook apps and technologies last year than amongst businesses not using these digital tools. Surveyed women-founded businesses in the US that used Facebook apps and technologies in 2019 were more likely to report that they were an important enabler in starting their business. Similarly, 69 per cent of women-founded businesses stated that Facebook apps and technologies were important to growing their business revenue, relative to 59 per cent of male-owned businesses surveyed in the US last year.

As Facebook apps and technologies promote wider accessibility to marketing and communication channels (as analysed earlier in this study), these tools empower women to contribute to the economy. For example, compared to men-founded

[38] Alliance for Board Diversity (2019)
[39] The New York Times (2018)
[40] McKinsey & Company (2018)

businesses, a greater share of women-founded businesses reported last year that Facebook apps and technologies were important as tools to overcome the challenges that their businesses face. In addition, 66 per cent of women-founded businesses said that Facebook apps and technologies were important as a means to create jobs in their local community (versus 49 per cent of men-founded businesses), reflecting the civic value and local spillover of benefits from empowering women's entrepreneurship. These findings hold promise for the post-COVID-19 recovery, as businesses seek to mitigate a variety of challenges and to rebuild jobs that have been lost.

5.5 SUMMING UP

In conclusion, many barriers to inclusion persist, blocking or delaying the path to democratising access to economic activity across a diverse pool of entrepreneurs. This is a global phenomenon that also applies to an advanced economy such as the US. As a result, business growth is constrained from reaching its fullest potential.

This chapter explores the role of inclusion as a driver of economic and social progress and shows that digital technologies can contribute to the empowerment of historically underrepresented groups. The evidence from women-founded firms across the 30 countries and regions surveyed — including the US — suggests that social media is an important tool for women's empowerment and success. Facebook apps and technologies enable that success through the economic inclusion that they afford to female entrepreneurs, in turn supporting local communities benefitting from their business activity.

CONC

CHAPTER VI:

LUSION

Social media is an important tool in the digital space, whether the user is an individual looking to connect with family across the world or a business hoping to reach a wider audience of customers. Today, 3.5 billion people are online.[1] Each of them has access to free social media platforms, making social media one of the most cost-effective ways to connect, collaborate, innovate, and market ideas, opinions, products, and services.

Recent estimates suggest that billions of users are on social media at any given time.[2] The number of businesses using social media is likely much lower, although still significant. Facebook apps and technologies are especially important players in this space, with 160 million businesses globally estimated to be using Facebook apps and technologies in 2019.[3]

This study explores the business impact of digital tools, looking specifically at the ecosystem of social media platforms owned by the Facebook company (Facebook, Instagram, Messenger, and WhatsApp) and how these platforms were used by firms around the globe in 2018-2019. To explore these uses, the report examines how digital technologies and tools helped firms to build their businesses during this period: supporting job creation, facilitating exports, and generating sales.

To be sure, economic conditions in April 2020 — characterised by contraction, disruption, and uncertainty — are significantly more challenging than the environment in which businesses operated at the time of the survey. Although the magnitude of the results from our work may not necessarily hold in current and forthcoming economic circumstances, the benefits and opportunities of social media partnerships identified by our research clearly indicate that businesses find value in these products and services.

In light of our findings, we also provide some perspective on the role of social media in future economic recovery and overall welfare. In the latter respect, we focus in particular on the ability of such tools to promote economic and social inclusion. In addition, we explore how digital tools can improve economic inclusion at the global level by allowing disadvantaged groups to get access to markets and customers, thereby supporting growth and equality.

[1] ITC (2018)

[2] Facebook (2019a). Our World in Data (2019, September 2018)

[3] Facebook (2019a)

6.1 OUR KEY FINDINGS

78%

of firms using Facebook apps and technologies used them for paid ads, free marketing, or finding new clients or customers.

First, digital technologies can facilitate economic inclusion in a wider sense, which can boost economic recovery and growth. The basic driver is better connectivity. Essentially, the internet — and the digital applications that navigate it — have allowed less-advantaged groups the ability to connect to the wider, sometimes global, economy and offer their products and services to customers farther away from their traditional business footprint. Our survey finds that businesses founded by women were more likely than those founded by men to report Facebook apps and technologies as important tools in starting their own businesses and overcoming challenges in 2019.[4] This suggests that Facebook apps and technologies have been helpful tools in the empowerment of female entrepreneurs.

We also find that digital technologies can be helpful in the processes of hiring and job seeking. Digital tools allow prospective employers to share job requirements with a wide group of potential candidates, while allowing applicants to apply to positions with short notice at limited or no cost. In our survey, 29 per cent of firms that were using Facebook apps and technologies reported that they used them for hiring purposes.[5]

Additionally, we find that digital technologies can help firms boost sales and production by lowering the costs of marketing and allowing more efficient and targeted access to customers. Advertising on social media became increasingly popular in the last decade. Our survey finds that 78 per cent of firms that reported using Facebook apps and technologies used them for paid ads, free marketing, or finding new clients or customers.[6]

We further find that digital technologies, particularly social media, can help facilitate business development. We show that digital technologies, including Facebook apps and technologies, have been an empowering factor for businesses, helping them overcome barriers to growth and exports, especially in developing countries and regions.[7]

The potential of digital technologies to open up, develop, and serve new markets has notably allowed firms to expand sales to more distant customers. We find, in our survey, a higher propensity to export for businesses that used Facebook apps and technologies (44 per cent) compared to businesses that did not use them (26 per cent), indicating that Facebook apps and technologies might be helpful in reducing trade costs.[8] This phenomenon is not limited to industrialised countries and regions,

[4] Please refer to the Methodology Appendix for a description of the survey.

[5] Please refer to the Methodology Appendix for a description of the survey.

[6] Please refer to the Methodology Appendix for a description of the survey.

[7] Please refer to the Methodology Appendix for a description of the survey.

[8] Please refer to the Methodology Appendix for a description of the survey.

where internet use has taken off. Our survey finds that a higher percentage of business owners in middle-income countries and regions said Facebook apps and technologies were important for them to expand into new markets in 2019.[9]

Across 30 countries and regions, businesses said that using Facebook apps and technologies helped them generate international sales corresponding to an estimated $342 billion (USD) in exports last year.[10] Surveyed businesses also said that using Facebook apps and technologies helped them generate sales corresponding to an estimated $984 billion (USD) in economic activity[11] last year.

Together, the literature, US case study, and survey results document the critical role Facebook apps and technologies played in supporting a range of business activities across 30 countries and regions as of 2019. This included supporting revenue generation, business expansion, and hiring and, in doing so, empowering a diverse set of entrepreneurs. The analysis of the US case study is consistent with these findings. Similar to our global findings, in the US, we find that surveyed American businesses that used Facebook reported higher growth rates, larger increases in headcount, and higher propensity to export than businesses that did not use Facebook. These businesses said that using Facebook apps and technologies helped them generate sales corresponding to an estimated $107 billion (USD) in economic activity and international sales corresponding to an estimated $9 billion (USD) in exports last year. These findings were replicated in a companion study focused on Europe.[12]

6.2 FURTHER RESEARCH COULD UNPACK THE IMPACT OF SOCIAL MEDIA

This study provides a snapshot of social media's influence on businesses, people, and economic inclusion in 2019. This report provides valuable insights into the use of digital technologies, social media, and Facebook apps and technologies, in particular, which have helped to break down barriers to growth on a global scale. We present two recommendations to deepen our collective understanding of these technologies going forward.

First, it could be useful to get a more granular understanding of how digital tools are used by businesses across the globe in a number of dimensions and how that may shape economic recovery for businesses. For example, it would be useful to look at different business models and industries, such as online firms selling digital services versus physical providers of goods. Other dimensions could include demographics of businesses (i.e. how businesses of different sizes and ages use digital tools) and economic development (i.e. how the speed of recovery and/or relative prosperity of the country or region affects the level of penetration of digital tools).

[9] Please refer to the Methodology Appendix for a description of the survey.

[10] Exact export estimate is $342,339,388,179 (USD). Please refer to the Methodology Appendix for a description of the survey.

[11] Exact GVA estimate $984,175,035.027 USD). Please refer to the Methodology Appendix for a description of the survey.

[12] Copenhagen Economics (2020)

Thus, a wider exploration of the business usage of digital technology, social media, and the Facebook apps and technologies could improve our understanding of the role digitalisation plays around the world today and how it may facilitate economic reconstruction in the post-COVID-19 era.

Second, this improved understanding could allow for clearer opportunities in digital technology adoption and could aid in the design of policy, which will be particularly relevant as political leaders seek to encourage recovery from losses associated with the COVID-19 pandemic. Although we expect there to be a significant gap in economic productivity and welfare between 2019 and 2020, these findings may serve as reference points for the future. Accordingly, this evidence may assist policymakers and business leaders seeking a potential way forward in the post-COVID-19 era as they engage in conversations about how best to promote and bolster business opportunities.

The 2019 survey evidence demonstrates that digital media tools are uniquely positioned to serve businesses globally. They continue to be a valuable resource for businesses that are in the middle of crisis and seek to leverage these tools to promote productivity and revenue recovery. Ultimately, a deeper understanding of how we use digital technologies will bring us closer to achieving economic recovery, growth, and economic inclusion — all of which offer enormous potential and benefit to our world.

RE

EFERENCE NOTES

Alaveras, G. & Martens, B. (2015), *International Trade in Online Services*, Working Paper by the Joint Research Centre of the European Commission. Retrieved from: https://ec.europa.eu/jrc/sites/jrcsh/files/JRC97233_Workingpaper_Alaveras_Martens_InternationalTrade_Online_services_191015.pdf

Alliance for Board Diversity & Deloitte (2019), *Missing Pieces Report: The 2018 Board Diversity Census of Women and Minorities on Fortune 500 Boards.* Retrieved from: https://www2.deloitte.com/us/en/pages/center-for-board-effectiveness/articles/missing-pieces-fortune-500-board-diversity-study-2018.html

Amazon Mechanical Turk (2019), *Access a Global, On-Demand, 24x7 Workforce.* Retrieved from: https://www.mturk.com

Asia Pacific MSME Trade Coalition (AMTC) (2018), *Micro-Revolution: The New Stakeholders of Trade in APAC.* Singapore: AMTC. Retrieved from: https://static1.squarespace.com/static/5393d501e4b0643446abd228/t/5a80fe5a4192024c49bd9e0a/1518403194740/AMTCDigitalTradeFeb2018.PDF

Asian Development Bank Institute (2019), *Fintech for Asian SMEs.* Retrieved from: https://www.adb.org/sites/default/files/publication/502781/adbi-fintech-smes.pdf

Bagues, M.F. & Labini, M.S. (2009), Do Online Labor Market Intermediaries Matter? In: D.H. Autor (ed.), *Studies of Labor Market Intermediation*. Chicago: University of Chicago Press, pp. 127-154

Bailey, M., Cao, R., Kuchler, T., Stroebel, J. & Wong, A. (2017), *Measuring Social Connectedness*, NBER Working Paper 23608. Retrieved from: http://www.nber.org/papers/w23608

Baldwin, R. & Taglioni, D. (2007), *Trade Effects of the Euro: A Comparison of Estimators*, Journal of Economic Integration, Vol. 22, Issue 4:780-818, December 2007. Retrieved from: https://www.jstor.org/stable/23000919?seq=1#page_scan_tab_contents

Banerji, D., & Reimer, T. (2019), *Start-Up Founders and Their LinkedIn Connections: Are Well-Connected Entrepreneurs More Successful?*, Computers in Human Behavior, 90:46-52

Basri, W. (2016), *Social Media Impact on Small and Medium Enterprises: Case Review of Businesses in the Arab World*, Arts and Social Sciences Journal, 7:6. DOI: 10.4172/2151-6200.1000236

Bertelsmann Stiftung (2019), *Subsidiarity and Proportionality in the Single Market: An EU Fit for Inclusive Growth*. Retrieved from: https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/EZ_Subsidiarity_Proportionality_2018_ENG.pdf

Bertschek, I. & Kesler, R. (2017), *Let the User Speak: Is Feedback on Facebook a Source of Firms' Innovation?*, ZEW Discussion Paper No. 17-015. Retrieved from: http://ftp.zew.de/pub/zew-docs/dp/dp17015.pdf

Brookings Institute (2017), *Opportunity for Growth: How Reducing Barriers to Economic Inclusion Can Benefit Workers, Firms, and Local Economies*. Retrieved from: https://www.brookings.edu/research/opportunity-for-growth-how-reducing-barriers-to-economic-inclusion-can-benefit-workers-firms-and-local-economies/

Brynjolfsson, E., Collis, A., Diewert, W.E., Eggers, F. & Fox, K.J. (2019), *GDP-B: Accounting for the Value of New and Free Goods in the Digital Economy,* NBER Working Paper 25695. Retrieved from: http://www.nber.org/papers/w25695

Byrne, D. & Corrado, C. (2019), *Accounting for Innovations in Consumer Digital Services: IT Still Matters*, Finance and Economic Discussion Series 2019-049. DOI: https://doi.org/10.17016/FEDS.2019.049

The Cairns Institute (2019), *Connectivity and Digital Inclusion in Far North Queensland's Agricultural Communities: Policy-Focused Report*. Retrieved from: https://www.cairnsinstitute.jcu.edu.au/connectivity-and-digital-inclusion/

CareerBuilder (2009), *Forty-Five Percent of Employers Use Social Networking Sites to Research Job Candidates, CareerBuilder Survey Finds.* Retrieved from: http://press.careerbuilder.com/2009-08-19-Forty-five-Percent-of-Employers-Use-Social-Networking-Sites-to-Research-Job-Candidates-CareerBuilder-Survey-Finds

CareerBuilder (2017), *Number of Employers Using Social Media to Screen Candidates at All-Time High, Finds Latest CareerBuilder Study*. Retrieved from: http://press.careerbuilder.com/2017-06-15-Number-of-Employers-Using-Social-Media-to-Screen-Candidates-at-All-Time-High-Finds-Latest-CareerBuilder-Study

Celeste, J.C. & Suarez, M.T.C. (2017), *Social Media as Enabler for ICT Inclusion to Achieve Active Ageing,* PACIS (2017) Proceedings. Retrieved from: https://aisel.aisnet.org/pacis2017/185/

Center for International Private Enterprise (2015), *Economic Inclusion: Leveraging Markets and Entrepreneurship to Extend Opportunity*. Retrieved from: https://www.cipe.org/wp-content/uploads/2015/05/FS_05262015-Economic-Inclusion.pdf

Chaney, T. (2013), *The Gravity Equation in International Trade: An Explanation*, NBER Working Paper 192852. Retrieved from: http://www.nber.org/papers/w19285

Chatzigeorgiou, C. (2017), *Modelling the Impact of Social Media Influencers on Behavioural Intentions of Millennials: The Case of Tourism in Rural Areas in Greece*, MPRA Paper No. 87916. Retrieved from: https://mpra.ub.uni-muenchen.de/87916/

Copenhagen Economics (2019), *Enabling Export Growth for Danish SMEs: The Role of Social Media*. Retrieved from: https://www.copenhageneconomics.com/publications/publication/enabling-export-growth-for-danish-smes-the-role-of-social-media

Copenhagen Economics (2020), *Empowering the European Business Ecosystem – An Impact Study of Businesses Using Facebook Apps and Technologies*. Retrieved from: https://www.copenhageneconomics.com/publications/publication/empowering-the-european-business-ecosystem

Deloitte (2018), *Shared Stories: Building Brand in the Digital Age*, commissioned by Facebook Australia. Retrieved from: https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-facebook-shared-stories-060718.pdf

Deloitte (2019), *The Economic Benefits of Improving Social Inclusion*. Retrieved from: https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-benefits-improving-social-inclusion-270819.pdf

DeSilver, D. (2015), *Businesses Owned by Women, Minorities Lag in Revenue Share*, Pew Research Center. Retrieved from: https://www.pewresearch.org/fact-tank/2015/09/01/businesses-owned-by-women-minorities-lag-in-revenue-share/

Eurostat (2019, May 8), *Social Media Use by Type, Internet Advertising*. Retrieved from http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_cismt&lang=en

Facebook (2016, March 2), *Three Million Business Stories. What's Yours?* Retrieved from: https://m.facebook.com/business/news/3-million-advertisers

Facebook (2019a), *Facebook Company Info*. Retrieved from: https://about.fb.com/company-info/

Facebook (2019b), *Helping Businesses Hire Through Jobs on Facebook*. Retrieved from: https://www.facebook.com/business/news/helping-businesses-hire-through-jobs-on-facebook

Facebook (2019c), *Q2 2019 Earnings Call Transcript*. Retrieved from: https://s21.q4cdn.com/399680738/files/doc_financials/2019/Q2/Q2'19-Earnings-Call-Transcript.pdf

Facebook company, OECD, and the World Bank (2017), *Future of Business Survey – Gender Management in Business*. Retrieved from: https://fbnewsroomes.files.wordpress.com/2017/02/future-of-business-survey-gender-management-in-business-january-20171.pdf

Facebook company, OECD, and the World Bank (2018), *Future of Business Survey – Financing Women-Owned Small Businesses: The Role of Size, Age and Industry*. Retrieved from: https://dataforgood.fb.com/wp-content/uploads/2019/03/Future-Of-Business_Access-to-Capital_March-2018.pdf

Federal Reserve Bank of St. Louis (2020), *FRED Data Service: Civilian Labor Force Level* (CLF16OV). Retrieved from: https://fred.stlouisfed.org/series/CLF16OV

Food and Agriculture Organization of the United Nations (2019), *Digital Technologies in Agriculture and Rural Areas, Briefing Paper*. Retrieved from: http://www.fao.org/3/ca4887en/ca4887en.pdf

Freeman, R.B. (2002), *The Labour Market in the New Information Economy*, Oxford Review of Economic Policy, Vol. 18, Issue 3:288–305

Friedman, T. (2005), *The World is Flat: A Brief History of the Twenty-First Century*, Farrar, Straus and Giroux

Gee, L.K., Jones, J.J., Fariss, C.J., Burke, M. & Fowler, J.H. (2017), *The Paradox of Weak Ties in 55 Countries*, Journal of Economic Behavior & Organization, 133:362-372. Retrieved from: http://dx.doi.org/10.1016/j.jebo.2016.12.004

Google (2018), *Economic Impact Report – United States*. Retrieved from: https://economicimpact.google.com/

GSMA (2017), *Person-to-Government (P2G) Payment Digitization: Lessons from Kenya*. Retrieved from: https://www.gsma.com/mobilefordevelopment/resources/government-person-p2g-payment-digitisation-lessons-kenya/

GSMA (2018), *The Mobile Economy: Sub-Saharan Africa*. Retrieved from: https://www.gsma.com/r/mobileeconomy/sub-saharan-africa/

Harvard Business Review (2018, September 25), *To Grow Your Business Abroad, Partner with Local Influencers*. Retrieved from: https://hbr.org/2018/09/to-grow-your-business-abroad-partner-with-local-influencers

Hunt, V., Prince, S., Dixon-Fyle, S. & Yee, L. (2018), *Delivering Through Diversity*, McKinsey & Company. Retrieved from: https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Organization/Our%20Insights/Delivering%20through%20diversity/Delivering-through-diversity_full-report.ashx

IDC (2018), *The Digitization of the World – From Edge to Core*, IDC White Paper, Doc# US44413318. Retrieved from: https://www.seagate.com/files/www-content/our-story/trends/files/idc-seagate-dataage-whitepaper.pdf

International Finance Corporation (2017), *MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Financing Micro, Small and Medium Enterprises in Emerging Markets*. Retrieved from: http://documents.worldbank.org/curated/en/653831510568517947/pdf/121264-WP-PUBLIC-MSMEReportFINAL.pdf

International Labour Organization (2009), *The Price of Exclusion: The Economic Consequences of Excluding People with Disabilities from the World for Work*, Employment Working Paper No. 43 by Sebastian Buckup. Retrieved from: https://www.ilo.org/employment/Whatwedo/Publications/working-papers/WCMS_119305/lang--en/index.htm

International Labour Organization (2016), *Women at Work*. Retrieved from: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_457317.pdf

International Labour Organization (2019), *Small Matters: Global Evidence on the Contribution to Employment by the Self-Employed, Micro-Enterprises and SMEs*. Retrieved from: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_723282.pdf

International Monetary Fund (2018), *Measuring the Digital Economy*. Retrieved from: https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/04/03/022818-measuring-the-digital-economy

International Trade Centre (2018), *SME Competitiveness Outlook 2018: Business Ecosystems for the Digital Age*. Retrieved from: http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/SMECO2018.pdf

Ipsos MORI (2018), *Instagram's Impact on Canadian Businesses.* Retrieved from: https://www.ipsos.com/sites/default/files/ct/publication/documents/2018-07/instagrams_impact_on_canadian_businesses_jul_18.pdf

JIIP and VVA (2016), *Evaluation and Analysis of Good Practices in Promoting and Supporting Migrant Entrepreneurship, Guide Book for the European Commission.* Retrieved from: http://www.jiip.eu/jiip_drupal/projects/evaluation-and-analysis-good-practices-promoting-and-supporting-migrant-entrepreneurship

Jobcase (2019), *Jobcase for Employers*. Retrieved from: https://www.jobcase.com/hire/?utm_medium=referral&utm_source=jobcase

Kaur, H. & Gera, J. (2017), *Effect of Social Media Connectivity on Success of Crowdfunding Campaigns*, Procedia Computer Science, 122:767-774. DOI: 10.1016/j.procs.2017.11.435

Kietzmann, J.H., Hermkens, K., McCarthy, I.P. & Silvestre, B.S. (2011), *Social Media? Get Serious! Understanding the Functional Building Blocks of Social Media*, Business Horizons, 54:241-251. DOI: 10.1016/j.bushor.2011.01.005

Kizza, J.M. (2012), *Africa Can Greatly Benefit from Virtualization Technology – Part II*, International Journal of Computing and ICT Research, Vol. 6, Issue 2:6-8. ISSN: 1996-1065

Kuhn, P., & Skuterud, M. (2004), *Internet Job Search and Unemployment Durations*, American Economic Review, Vol. 94, Issue 1:218-232

Lanz, R., Lundquist, K., Mansio, G., Mauer, A. & The, R. (2018), *E-Commerce and Developing Country-SME Participation in Global Value Chains*, WTO Staff Working Paper, No. ERSD-2018-13. Retrieved from: http://hdl.handle.net/10419/190765

Lendle, A., Olarreaga, M., Schropp, S. & Vézina, P. (2012), *There Goes Gravity: How eBay Reduces Trade Costs*, Discussion Paper No. 9094, Centre for Economic Policy Research. Retrieved from: https://cepr.org/active/publications/discussion_papers/dp.php?dpno=9094#

LinkedIn (2018, October 11), *Building Enterprise Software on LinkedIn's Consumer Stack: Behind the Scenes of LinkedIn Talent Hub*. Retrieved from: https://engineering.linkedin.com/blog/2018/10/building-linkedin-talent-hub

LinkedIn (2019), *Recruitment Ads and Sponsored Content*. Retrieved from: https://business.linkedin.com/talent-solutions/sponsored-content-and-recruitment-ads#

The Manifest (2019), *How Small Businesses Use Digital Marketing Channels in 2019*. Retrieved from: https://themanifest.com/digital-marketing/how-small-businesses-use-digital-marketing-channels-2019

Manpower (2018), *2018 Talent Shortage Survey: Which Roles Are the Hardest to Fill?* Retrieved from: https://go.manpowergroup.com/talent-shortage#hardesttofillroles

McDaniel, C. & Parks, D. (2019), *Businesses on Facebook and Propensity to Export: Australia*, Policy Brief from Mercatus Center, George Mason University. Retrieved from: https://www.mercatus.org/system/files/mcdaniel_and_parks_-_policy_brief_-_digital_platforms_small-_and_medium-sized_businesses_-_v1.pdf

McKinsey & Company (2015a), *Infographic: The Five Components of Digital Marketing Operations*. Retrieved from: https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/infographic-the-five-components-of-digital-marketing-operations

McKinsey & Company (2015b), *A Labor Market that Works: Connecting Talent with Opportunity in the Digital Age*. Retrieved from: https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Employment%20and%20Growth/Connecting%20talent%20with%20opportunity%20in%20the%20digital%20age/MGI%20Online%20talent_A_Labor_Market_That_Works_Executive_%20summary_June%202015.ashx

McKinsey & Company (2016), *Digital Globalization: The New Era of Global Flows*. Retrieved from: https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/McKinsey%20Digital/Our%20Insights/Digital%20globalization%20The%20new%20era%20of%20global%20flows/MGI-Digital-globalization-Full-report.ashx

McKinsey & Company and Leanin.org (2018), *Women in the Workplace.* Retrieved from: https://wiw-report.s3.amazonaws.com/Women_in_the_Workplace_2018.pdf

McKinsey Global Institute (2016), *The Power of Parity: Advancing Women's Equality in the United States*, McKinsey & Company. Retrieved from: https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Employment%20and%20Growth/The%20power%20of%20parity%20Advancing%20womens%20equality%20in%20the%20United%20States/MGI-Power-of-Parity-in-US-Full-report-April-2016.ashx

McManus, M.J. (2017), *Women's Business Ownership: Data from the 2012 Survey of Business Owners,* Issue Brief Number 13. Office of Advocacy, U.S. Small Business Administration. Retrieved from: https://cdn.advocacy.sba.gov/wp-content/uploads/2017/05/22154543/Womens-Business-Ownership-in-the-US.pdf

Melissa, E., Hamidati, A., Saraswati, M.S. & Flor, A. (2015), The Internet and Indonesian Women Entrepreneurs: Examining the Impact of Social Media on Women Empowerment. In: Chib, A., May, J. & Barrantes, R. (eds.), *Impact of Information Society Research in the Global South*. Singapore: Springer.

Miller, C.C., Quealy, K. & Sanger-Katz, M. (2018), *The Top Jobs Where Women Are Outnumbered by Men Named John*, The New York Times. Retrieved from: https://www.nytimes.com/interactive/2018/04/24/upshot/women-and-men-named-john.html

Mourtada, R. & Salem, F. (2012), *Social Media in the Arab World: The Impact on Youth, Women and Social Change*, European Institute of the Mediterranean Yearbook 2012. Retrieved from: https://www.iemed.org/observatori/arees-danalisi/arxius-adjunts/anuari/med.2012/mourtada%20salem_en.pdf

Nobre, H. & Silva, D. (2014), *Social Network Marketing Strategy and SME*, Journal of Transnational Management, Vol. 19, Issue 2:138-151. DOI: 10.1080/15475778.2014.904658

Nyaga, K.M. & Okonga, B.M. (2014), *Does Mobile Money Services Have Any Impact on SMEs' Performance in Naivasha?* International Journal of Current Research, Vol. 6, Issue 10:9394-9398. Retrieved from: https://www.journalcra.com/sites/default/files/issue-pdf/6550.pdf

OECD (2008), *Understanding Economic Statistics, An OECD Perspective*. Retrieved from: https://www.oecd.org/sdd/41746710.pdf

OECD (2010), *The Economic and Social Role of Internet Intermediaries*. Retrieved from: https://www.oecd.org/internet/ieconomy/44949023.pdf

OECD (2017a), *Enhancing the Contributions of SMEs in a Global and Digitalised Economy*, Ministerial Level, Paris (2017, June 7-8). Retrieved from: https://www.oecd.org/mcm/documents/C-MIN-2017-8-EN.pdf

OECD (2017b), *Entrepreneurship at a Glance 2017*. Retrieved from: https://www.oecd.org/sdd/business-stats/entrepreneurship-at-a-glance-22266941.htm

OECD (2018), *Fostering Greater SME Participation in a Globally Integrated Economy*, Discussion Paper at the SME Ministerial Conference, Plenary Session 3. Retrieved from: https://www.oecd.org/cfe/smes/ministerial/documents/2018-SME-Ministerial-Conference-Plenary-Session-3.pdf

OECD (2019a), *OECD Harmonised Unemployment Rates*, News Release, July 2019. Retrieved from: https://www.oecd.org/employment/labour-stats/harmonised-unemployment-rates-oecd-09-2019.pdf

OECD (2019b), *Productivity Growth in the Digital Age*. Retrieved from: https://www.oecd.org/going-digital/productivity-growth-in-the-digital-age.pdf

OECD (2019c), *SME and Entrepreneurship Outlook*. Retrieved from: https://www.oecd.org/industry/oecd-sme-and-entrepreneurship-outlook-2019-34907e9c-en.htm

Our World In Data (2019, September 18), *The Rise of Social Media*. Retrieved from: https://ourworldindata.org/rise-of-social-media

Paypal (2018), *Democratizing Globalization: How Small Businesses Across America Are Growing in the Digital Marketplace*. https://www.paypalobjects.com/digitalassets/c/website/marketing/na/us/public-policy/docs/democratizing_globalization.pdf

Pew Research Center (2019), *Social Media Factsheet*. Accessed February 2020 from https://www.pewresearch.org/internet/fact-sheet/social-media/

Ramaabaanu, R. & Saranya, M. (2014), *Importance and Problems of E-Recruitment*, International Journal of Research, Vol. 1, Issue 9, October 2014. ISSN: 2348-6848

Rao, Y. (2016, February 7), *Preparing for a Skype Interview? You Might Just Get Hired on WhatsApp!*, The Economic Times. Retrieved from: https://economictimes.indiatimes.com/magazines/panache/preparing-for-a-skype-interview-you-mightjust-gethired-on-whatsapp/articleshow/50886757.cms?from=mdr

Ryan, C.L., & Bauman, K. (2016), *Educational Attainment in the United States: 2015*, Current Population Reports, U.S. Census Bureau. Retrieved from: www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf

Salemink, K., Strijker, D. & Bosworth, G. (2017), *Rural Development in the Digital Age: A Systematic Literature Review on Unequal ICT Availability, Adoption, and Use in Rural Areas*, Journal of Rural Studies, 54:360-371. DOI: http://dx.doi.org/10.1016/j.jrurstud.2015.09.001

Sen, A. (1999), *Development as Freedom* (1st Ed.), Oxford University Press

Townsend, L., Wallace, C. & Fairhurst, G. (2015), *'Stuck Out Here': The Critical Role of Broadband for Remote Rural Places*, Scottish Geographical Journal, 131:3-4, 171-180. DOI: 10.1080/14702541.2014.978807

Trade Partnership Worldwide (2019), *Trade and American Jobs*. Retrieved from: https://tradepartnership.com/wp-content/uploads/2019/03/Trade-and-American-2019-FINAL.pdf

Twitter (2019), *Ad Targeting: Tips & Tricks for the Best Targeting Mix*. Retrieved from: https://business.twitter.com/en/targeting.html

United Nations (2019), *About the Sustainable Development Goals*. Retrieved from: https://www.un.org/sustainabledevelopment/sustainable-development-goals/

U.S. Bureau of Economic Analysis, *Table 1.1.5. Gross Domestic Product*. Retrieved from: https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey

U.S. Bureau of Labor Statistics (2020), *The Employment Situation – January 2020*. Retrieved from: https://www.bls.gov/news.release/pdf/empsit.pdf

U.S. Chamber of Commerce (2017), *The Benefits of International Trade*. Retrieved from: https://www.uschamber.com/international/international-policy/benefits-international-trade

U.S. Chamber of Commerce Technology Engagement Center and Google (2019), *Growing Small Business Exports: How Technology Strengthens American Trade*. Retrieved from: https://americaninnovators.com/small-business-exports/

U.S. Department of Commerce, International Trade Administration (2015), *Jobs Supported by State Exports 2014*.

U.S. International Trade Commission (2014), *Digital Trade in the U.S. and Global Economies, Part 2*. Retrieved from: https://www.usitc.gov/publications/332/pub4485.pdf

U.S. Office of Personnel Management (2017), *Federal Equal Opportunity Recruitment Program (FEORP) Report*. Retrieved from: https://www.opm.gov/policy-data-oversight/diversity-and-inclusion/reports/feorp-2017.pdf

U.S. Small Business Administration Office of Advocacy (2018), *United States Small Business Profile, 2018*. Retrieved from: https://www.sba.gov/sites/default/files/advocacy/2018-Small-Business-Profiles-US.pdf

U.S. Small Business Administration Office of Advocacy (2019), *United States Small Business Profile, 2019*. Retrieved from https://cdn.advocacy.sba.gov/wp-content/uploads/2019/04/23142719/2019-Small-Business-Profiles-US.pdf

Vicknair, J., Elkersh, D., Yancey, K. & Budden, M.C. (2010), *The Use of Social Networking Websites as a Recruiting Tool for Employers*, American Journal of Business Education, Vol. 3, Issue 11:7-12. DOI: https://doi.org/10.19030/ajbe.v3i11.57

Workable (2018, October 24), *Ask a Recruiter: Why and How Do You Use WhatsApp for Recruiting Candidates?* Retrieved from: https://resources.workable.com/stories-and-insights/how-to-use-whatsapp-recruiting

World Bank (2014), *Women and Trade in Africa: Realizing the Potential*. Retrieved from: http://documents.worldbank.org/curated/en/115591468211805723/pdf/825200WP0Women00Box379865B00PUBLIC0.pdf

World Bank (2018, March 29), *Many Governments Take Steps to Improve Women's Economic Inclusion, Although Legal Barriers Remain Widespread*. Retrieved from: https://www.worldbank.org/en/news/press-release/2018/03/29/many-governments-take-steps-to-improve-womens-economic-inclusion-although-legal-barriers-remain-widespread

World Trade Organization (2018), *World Trade Report 2018. The Future of World Trade: How Digital Technologies are Transforming Global Commerce*. Retrieved from: https://www.wto.org/english/res_e/publications_e/world_trade_report18_e.pdf