

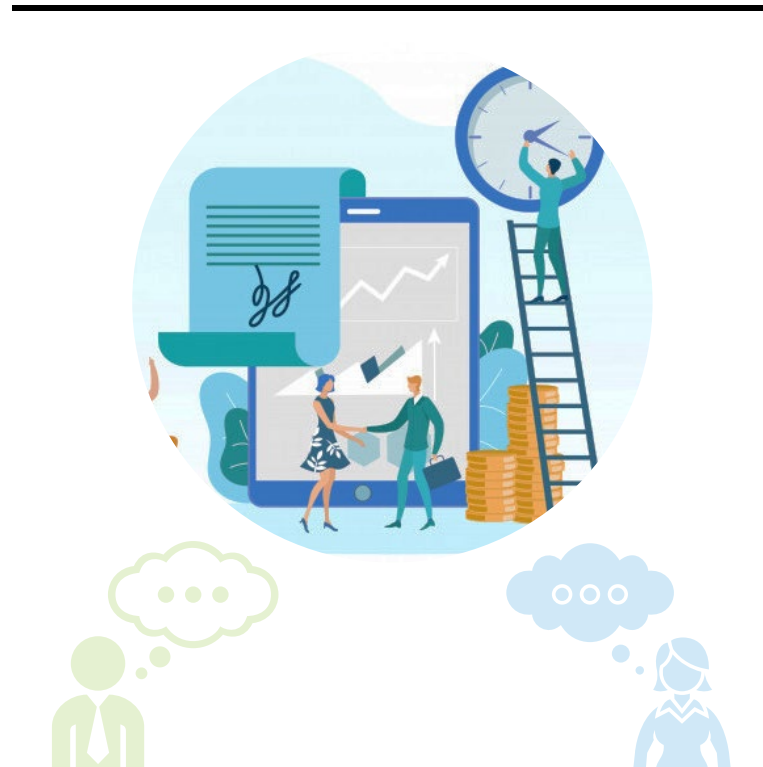


Economic Impact Study of Shopify

October 2019

Foreword to the Report

Foreword by Craig Alexander Chief Economist, Deloitte Canada



Economic prosperity is tied to the success of small and medium-sized enterprises (SMEs) led by entrepreneurs who innovate and bring new ideas to market.¹ Their brands may not be household names, but their economic contribution is enormous. In the Organization for Economic Co-operation and Development (OECD) member countries, SMEs represent 50%-60% of gross domestic product (GDP, i.e., economic activity) and nearly 70% of employment on average. Additionally, new businesses are the major driver of net new-job creation. Small firms punch well above their weight.

Entrepreneurs also innovate and commercialize disruptive business ideas. They introduce new products, services, and organizational structures, and leverage new technology. All of this elevates competition, placing pressure on incumbent firms to evolve and invest more. For these reasons, empowering entrepreneurship is a critical ingredient for economic competitiveness, productivity, and prosperity.

The need to strengthen entrepreneurship is especially important today. The global economy is slowing, world trade is contracting, and, in the short term, there are worries about a potential turn in the global business cycle. This environment can curtail income growth and limit the scope for citizens to experience a rising standard of living. It can also add to the trend of rising income equality, as lower levels of income gains are not evenly shared across workers. Exacerbating this issue,

the weaker economic environment curbs the fiscal revenues of governments, creating challenges for delivering on their social priorities.

In the long term, aging demographics and weaker productivity gains are dampening economic progress, and the sustainable rate of growth in most advanced economies has dropped to below 2% annually. To break out of the sustained slow growth environment, entrepreneurship needs to be unleashed, and barriers to innovation, productivity, and competitiveness eliminated.

It is within this context that Deloitte was retained by Shopify to conduct economic analysis and ultimately produce this report—"Economic Impact Study of Shopify." With a broad lens, this study explores the economic contributions of Shopify as it relates to the firm's corporate operations, partners, and merchants. Collectively, these three groups form Shopify's global business ecosystem, and to assess Shopify's total footprint they must all be taken into consideration.

This report quantifies Shopify's GDP, labor income, employment, and tax revenue contribution. To do this, we built a customized global economic impact model that estimates the economic impacts of Shopify's corporate operations and merchants.^{2, 3}

The magnitude of economic impacts associated with Shopify are substantive. Between 2016 and 2018, the

Foreword to the Report

Cumulative GDP contribution of corporate operations amounted to \$3.1 billion (all \$ values presented in USD). In 2018 alone, this impact was \$1.6 billion, which is equal to nearly 5% of Ontario’s professional, scientific, and technical services industry GDP contribution. For further context, Ontario, Canada’s largest province and where Shopify is headquartered, would rank as one of the top 25 largest economies in the world if it were a country.

Meanwhile, between 2016 and 2018, the cumulative GDP contribution supported by merchants amounted to \$183.1 billion. In 2018 alone, this impact was \$91.1 billion USD, which is equivalent to the size of a top 50 US city’s GDP contribution. Our analysis also finds that the collective scope of annual merchant revenues are comparable to a Fortune 100 company.

These quantifiable impacts are considerable. Yet, as a leading retail operating systems provider that strengthens entrepreneurship, Shopify’s economic contribution extends beyond generating one-time GDP, labor income, jobs, and government tax revenues. Our research reveals that Shopify also delivers positive structural economic impacts—benefits to how the economy functions—through five underlying mechanisms:

1. Removing Business Barriers and Adding Operational Capabilities: Shopify provides fundamental business services for a low cost. As a result, Shopify provides opportunities for

entrepreneurs to establish a business and scale.

2. Supporting Borderless Commerce: Shopify reduces cultural and geographic business barriers and facilitates access to new markets (i.e., non-local markets) for its merchants and partners.

3. Broadening Global Growth: By acting as a catalyst of entrepreneurial activity and international trade, Shopify enables broader economic prosperity across the world.

4. Strengthening and Diversifying “Direct-to-Consumer” and Ecommerce: Shopify has led innovation in the direct to consumer retail model and ecommerce, which, by second order, gives rise to economic benefits for merchants and consumers.

5. Growing Canada’s Technology Sector: As a leading firm located in Canada, Shopify generates positive momentum in the country’s technology sector.

This study presents Shopify data alongside market and macroeconomic data to outline how Shopify generates impact through each of these channels. Our report does not attempt to quantify the total magnitude of Shopify’s structural impacts. Instead, we provide evidence that first-order impacts are occurring (e.g., Shopify is removing business barriers, Shopify is enabling entrepreneurs to access new markets, etc.) that are the ingredients for meaningful second-order impacts, such as

competition and productivity, innovation and entrepreneurship, and, ultimately, sector growth and job creation.

The data is clear that Shopify services have broadened possibilities available for entrepreneurs and businesses. The quantifiable impacts of GDP, labor income, employment, and government tax revenues are substantive. Yet—in this current period of slower economic growth—it is also important to consider that Shopify is empowering entrepreneurship and business growth at a time they are especially needed.



Craig Alexander

Chief Economist at Deloitte Canada

¹ Due to varying degrees of economic development across countries, there is not a formalized global definition for SMEs. In the United States, SMEs are businesses with 499 employees or less. However this definition does not apply reasonably to less economically developed jurisdictions.

² Important technical details: Our model has the sophistication to quantify, at the country level, the location and magnitude of economic impacts and whether they are direct, a result of supply chain activity (indirect), or a result of household expenditure associated with the income earned directly (induced). Additionally, our model estimates the gross impacts of Shopify’s corporate operations and merchants. It does not assess whether this economic activity is incremental (i.e., the impact would not have occurred without Shopify).

³ In a separate analysis, we also developed an estimation of how many jobs were supported by Shopify’s partner network.

With a broad lens, this report explores Shopify's global economic impact through six key underlying themes

1. SHOPIFY'S CORE ECONOMIC IMPACT



Shopify's global business ecosystem drives quantitative economic impacts in terms of GDP, labor income, employment, and government tax revenues.

4. BROADENING GLOBAL GROWTH



By acting as a catalyst of entrepreneurial activity and international trade, Shopify enables broader economic prosperity across the world.

2. REMOVING BUSINESS BARRIERS AND ADDING OPERATIONAL CAPABILITIES



Shopify provides fundamental business services for a low cost. As a result, Shopify opens opportunity for entrepreneurs to establish a business and scale.

5. STRENGTHENING AND DIVERSIFYING "DIRECT-TO-CONSUMER" AND ECOMMERCE



Shopify is a global leader in enabling and innovating the direct to consumer retail model and ecommerce, which leads to economic benefits for merchants and consumers.

3. SUPPORTING BORDERLESS COMMERCE



Shopify reduces cultural and geographic business barriers and facilitates access to new markets for its merchants and partners.

6. GROWING CANADA'S TECHNOLOGY SECTOR



As a leading firm located in Canada, Shopify generates positive momentum in the country's technology sector.

Within each narrative, there are several key points that fit our three areas of analysis—corporate operations, partners, and merchants



Corporate Operations

Corporate operations refers to the underlying Shopify business operations that provide the platform, support, and information for partners and merchants.



Partners

Partners refers to the diverse group of designers, developers, marketers, and affiliates who use the Shopify platform to build ecommerce websites, themes, and apps for merchants.¹

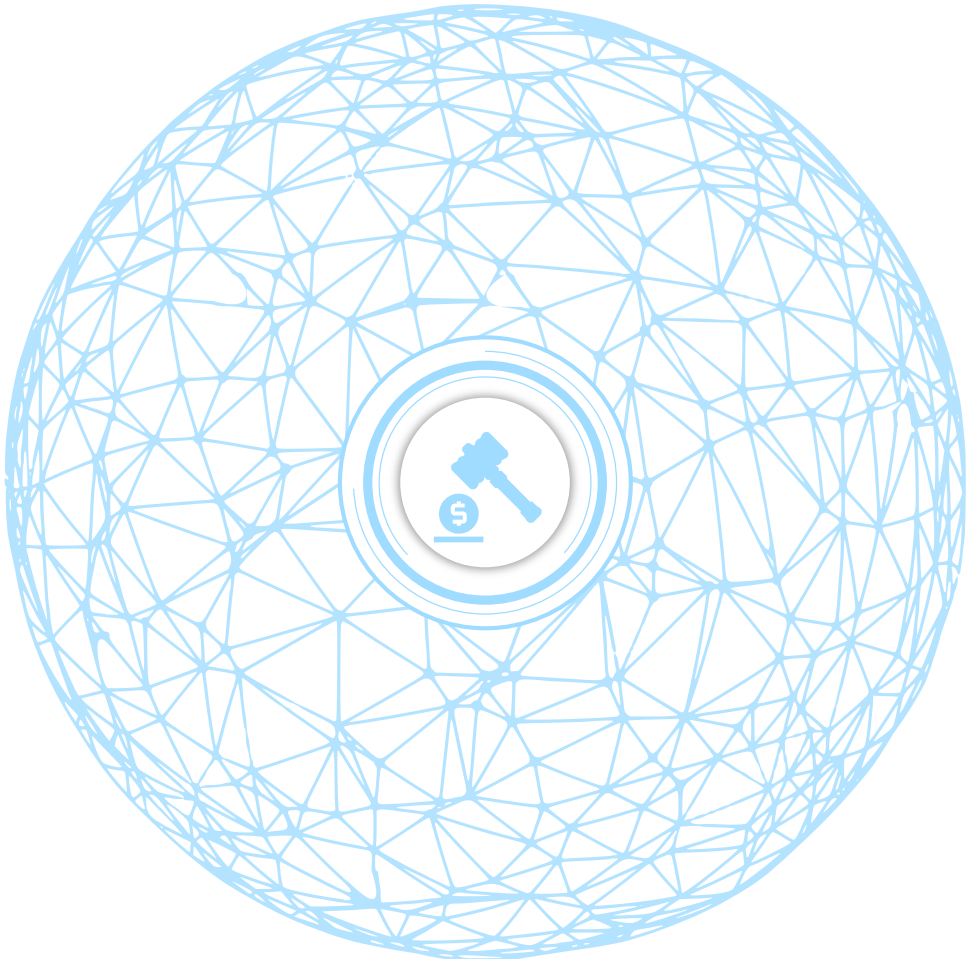


Merchants

Merchants refers to the entrepreneurs and businesses who subscribe to Shopify and use the platform and resources to become established and scale.

¹ In this report, we also refer to “partnerships,” which are external companies, such as dropshipping apps, Payment Gateway Partners, etc., who do not provide theme, app, or referral service but are nevertheless third parties that are involved in the broader Shopify ecosystem.

Shopify's Core Economic Impact



Shopify's Core Economic Impact

Shopify and its network of partners and merchants support significant economic activity.



Shopify is the cornerstone of a vast, global business ecosystem, consisting of corporate operations, partners and partnerships, and merchants. Each of these segments drives economic activity through generating sales and operating their businesses:

- Shopify sells a complete tool kit of business services to merchants for a subscription fee. To provide these services, it employs a large workforce and makes operating expenditures on third-party services, technical equipment, and more.
- Merchants sell their products to consumers. To develop and commercialize their products, they may employ staff and procure materials and services.
- Referral, app, and theme partners sell services to Shopify (via referrals) and merchants. As it follows, they employ staff and procure materials and services that they need to operate.

As Shopify, merchants, and partners make expenditures, supplier businesses to these groups also make expenditures to operate.

Additionally, a portion of the salaries paid to the employees of Shopify, merchants, partners, and their suppliers are cycled back into the economy in the form of household spending.

Collectively, this pattern of economic activity forms the direct, indirect, and induced economic

impacts generated by Shopify:

- Direct impacts result from the first round of expenditures.
- Indirect impacts result from the second and subsequent rounds of spending by businesses providing intermediate goods and services.
- Induced impacts result from households spending the wages earned through direct expenditures.

Based on an input-output approach, we built a global economic impact model that estimates the direct, indirect, and induced impacts of Shopify's corporate operations and merchants. The key economic variables output by our model are GDP, employment-in full time equivalents, (FTEs)-labor income, and government tax revenues.

As additional analysis, we also developed two models that estimate (i) direct employment supported by Shopify's partner network, and (ii) the GDP, employment, labor income, and government tax revenue impacts of the 2019 Unite conference to Toronto and Canada.

In aggregate, this provides a perspective on Shopify's economic value chain as it relates to spending in the economy. Building on this core economic impact, we will subsequently explore how Shopify enhances market competition, productivity, innovation, and entrepreneurship, which ultimately leads to longer-term sector growth and job creation.

Shopify's Core Economic Impact

Shopify is the cornerstone of a vast, global business ecosystem.

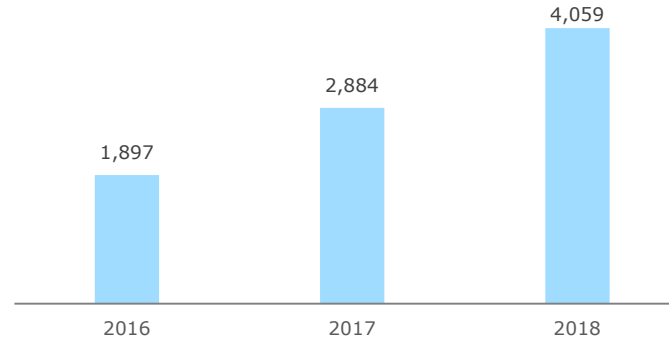
As a leading retail operating system provider, Shopify is the cornerstone of a vast, global business ecosystem.

Headquartered in Ottawa, Shopify employs over 4,000 workers across 15 cities and various remote locations. Shopify continues to expand its corporate operations, opening new offices across North America (Toronto, New York, San Francisco) and Europe (Berlin, Vilnius, Stockholm) between 2016 and 2019.

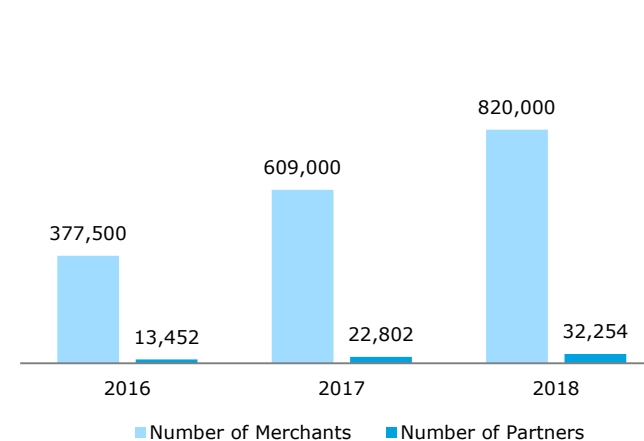
In 2018, the platform powered approximately 820,000 merchants and 32,000 active affiliate, theme, and app partners, who generated \$41.1 billion and \$124.2 million in sales, respectively.¹ When aggregated, these revenue levels rank Shopify entrepreneurs among the largest companies in the world.

¹ Partner sales of \$124.2 million refer to Shopify payouts, which excludes revenue earned outside of Shopify.

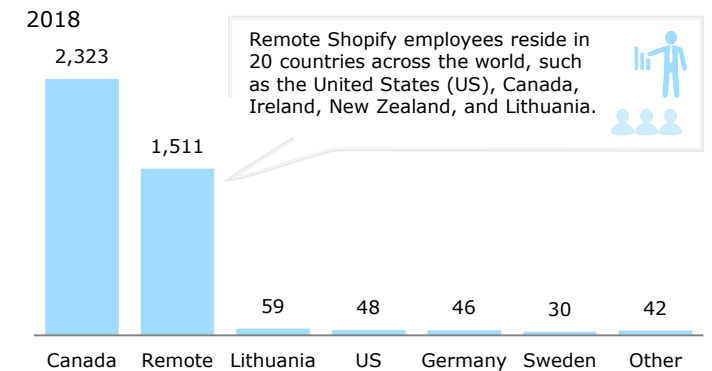
Growth in Shopify headcount
2016–2018



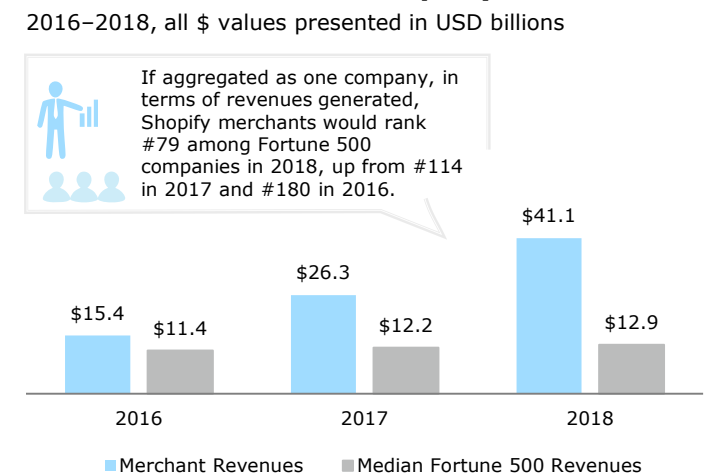
Growth in partner and merchant businesses
2016–2018



Shopify headcount, by country



Total merchant revenues compared to the median Fortune 500 company revenues



Source: Shopify; Fortune 500; Deloitte Analysis

Shopify's Core Economic Impact

We quantified the static economic impacts of Shopify's corporate operations and merchants.

Using a range of macroeconomic data sources, we built a customized economic impact model that computes the global direct, indirect, and induced impacts associated with Shopify's corporate operations and merchants.

Key Definitions

- **Direct impacts** result from the first round of expenditures.
- **Indirect impacts** result from the second and subsequent rounds of spending by businesses providing intermediate goods and services.
- **Induced impacts** result from households spending the wages earned through direct expenditures.

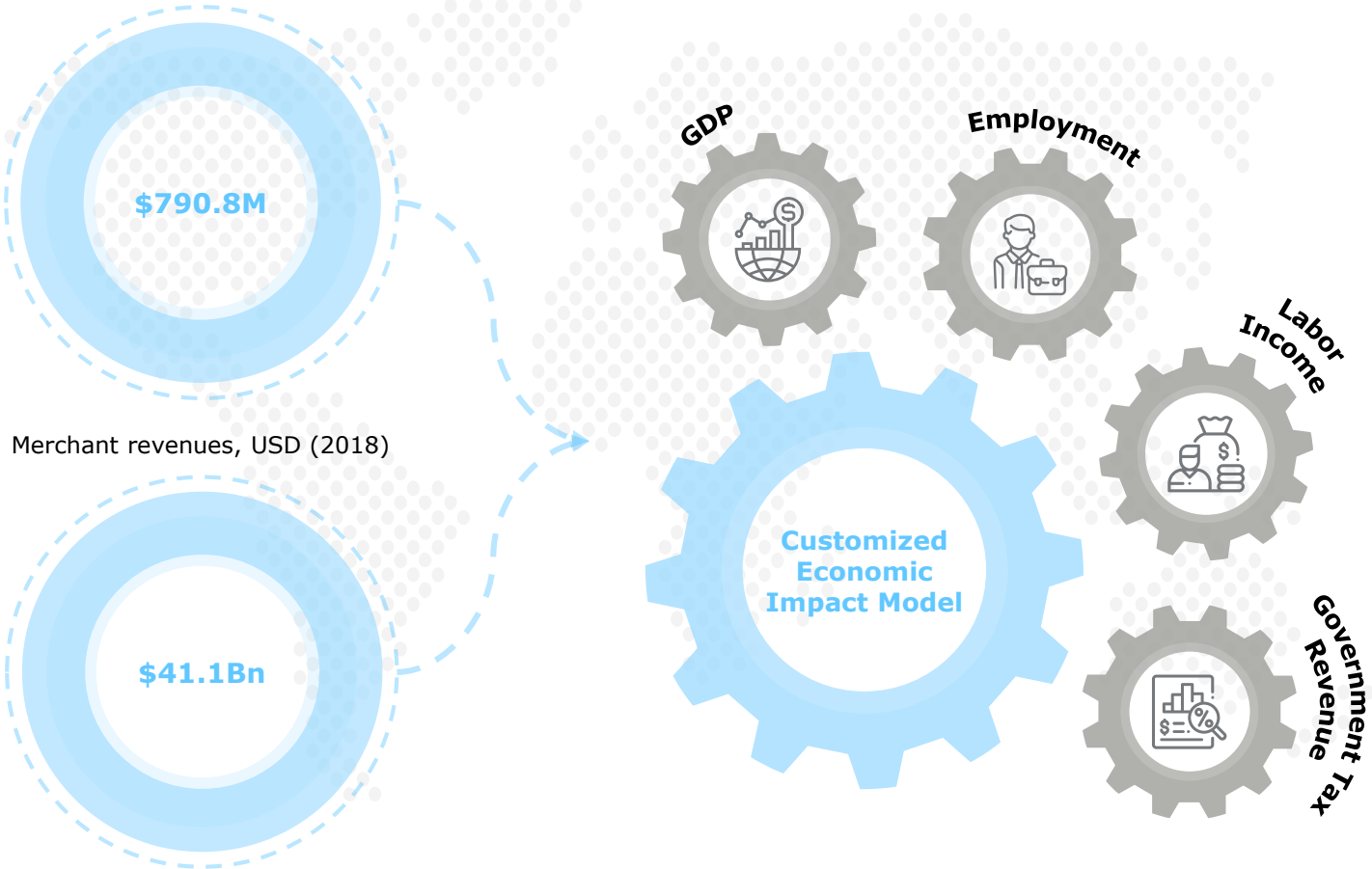
Key Model Details

Our model is based on an input-output framework, a standard approach in economic analysis that enables a clear distinction between direct, indirect, and induced impacts. To capture the impacts of imported supply-chain activity and induced spending, we augmented our model with detailed bi-lateral trade data. The key data sources for our model include OECD, UN, and IMF, all of which are standard sources used in economic analysis.

Our model estimates the gross impacts of Shopify's corporate operations and merchants. It does not assess whether this economic activity is net-new (i.e., the impact would not have occurred without Shopify).

Economic impact model framework

Shopify corporate operations expenditures, USD (2018)



Shopify's Core Economic Impact

We estimate that Shopify's corporate operations supported the following economic impacts in 2018.

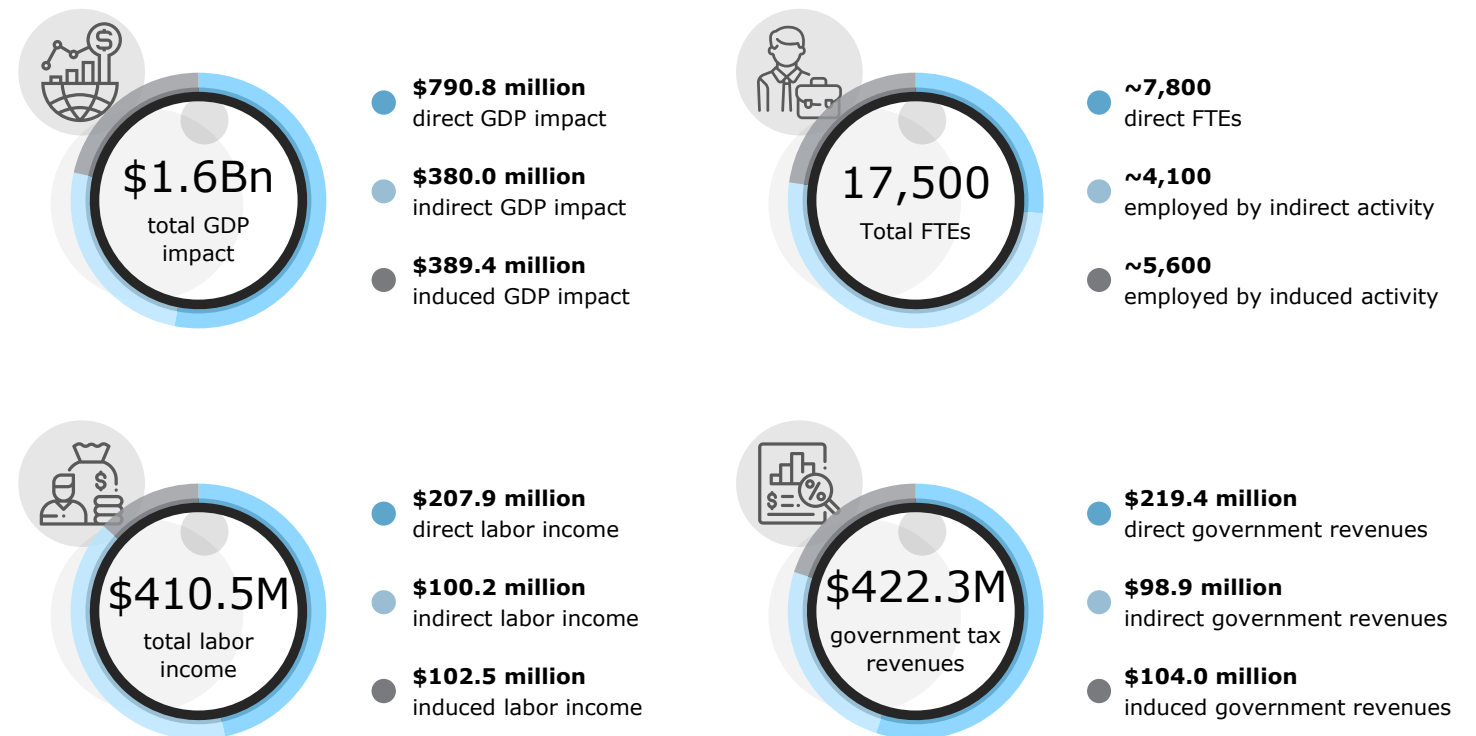
Accounting for the direct, indirect, and induced impacts, Shopify's corporate operations supported a cumulative GDP contribution of \$3.1 billion between 2016 and 2018.

In 2018 alone, Shopify's corporate operations supported a \$1.6 billion GDP contribution and the employment of approximately 17,500 FTEs in 2018. This GDP impact is equal to 4.5% of Ontario's professional, scientific, and technical services industry GDP in 2018.¹ For further context, Ontario, Canada's largest province and where Shopify is headquartered, would rank as one of the top 25 largest economies in the world if it were a country.

¹ While a proportion of the \$1.6 billion contribution did not accrue within the province, this comparison illustrates the magnitude of Shopify's corporate operations' economic footprint. The comparison to Ontario's professional, scientific, and technical services industry was deemed fitting because Shopify is a business within that sector.

Global economic impacts of Shopify's corporate operations

2018, all \$ values presented in USD



Note: Labor Income and Taxes are components of GDP.

Shopify's Core Economic Impact

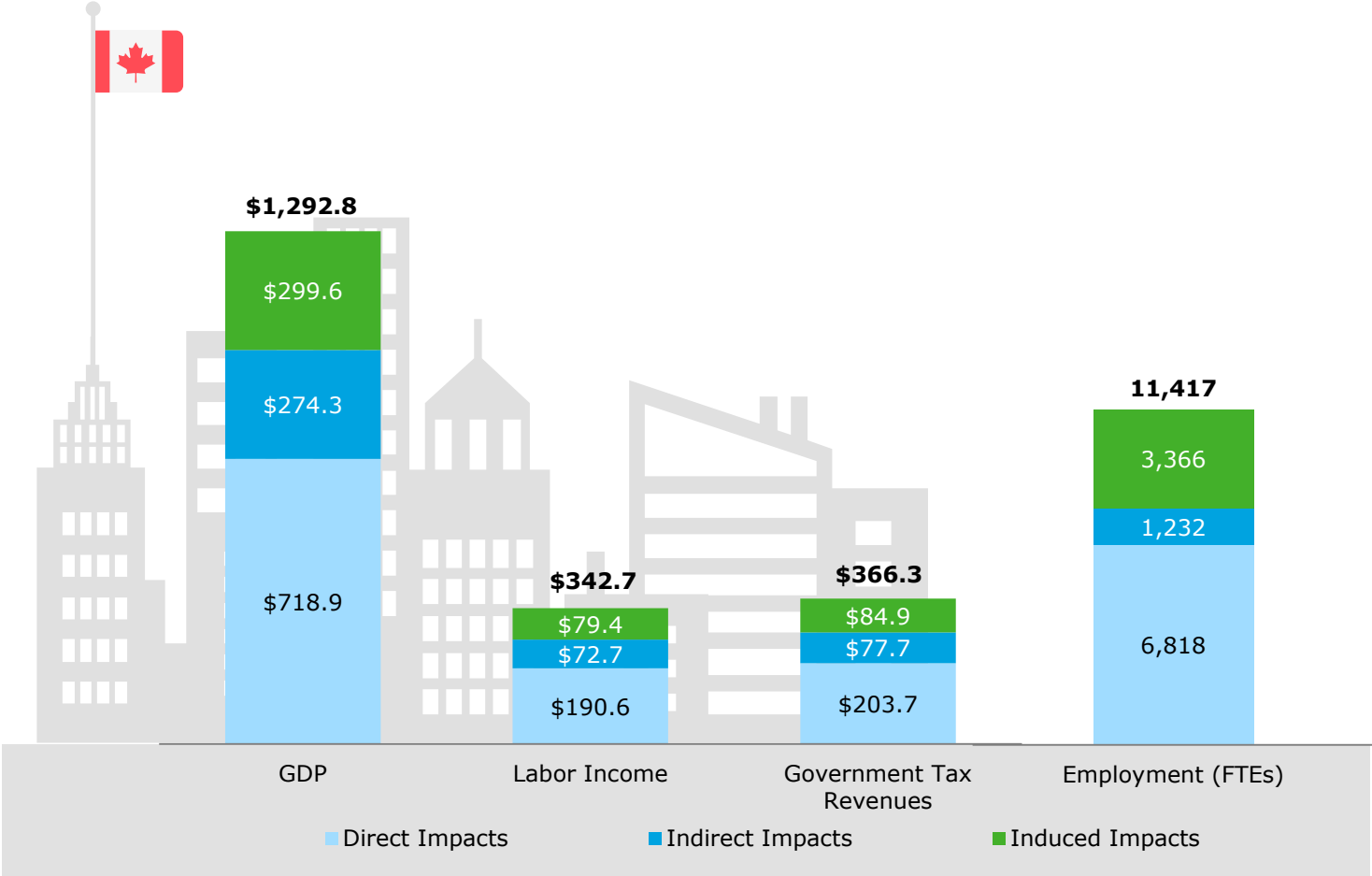
Deep Dive Analysis

The economic impacts of Shopify's corporate operations to Canada.

With its headquarters in Ottawa, and significant operations in Toronto, Waterloo, and Montreal, the majority of static economic impacts associated with Shopify's corporate operations occur in Canada.

Static economic impacts of Shopify's corporate operations in Canada

2018, all \$ values presented in USD millions



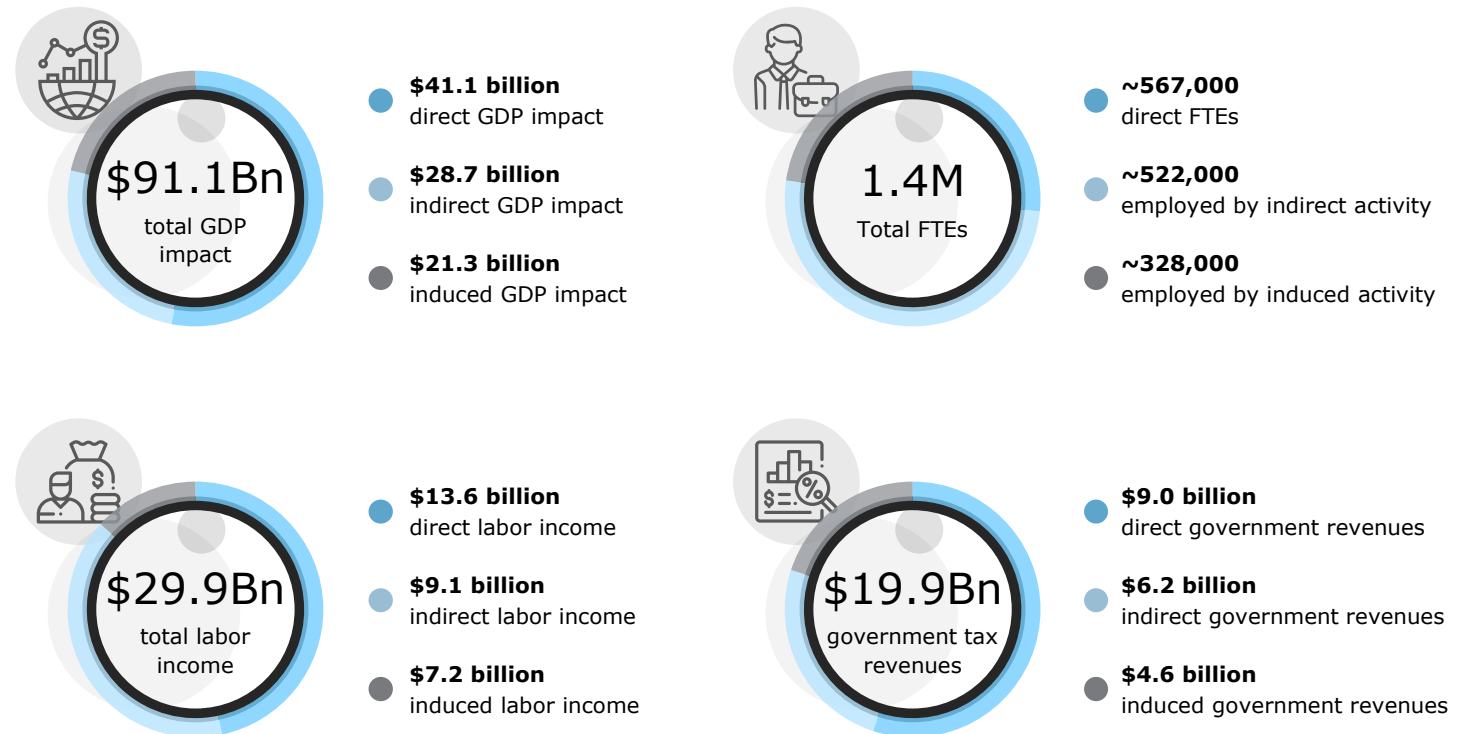
Shopify's Core Economic Impact

We estimate that Shopify's merchants supported the following economic impacts in 2018.

Accounting for the direct, indirect, and induced impacts, Shopify merchant business activity supported a cumulative GDP contribution of \$183.1 billion between 2016 and 2018.

In 2018 alone, Shopify merchant business activity supported a \$91.1 billion and the employment of 1.4 million FTEs in 2018. As context, this magnitude of GDP impact compares to the size of a top 50 US city's GDP.

Global economic impacts of Shopify merchant business activity 2018, all \$ values presented in USD



Note: Labor Income and Taxes are components of GDP.

Shopify's Core Economic Impact

Deep Dive Analysis

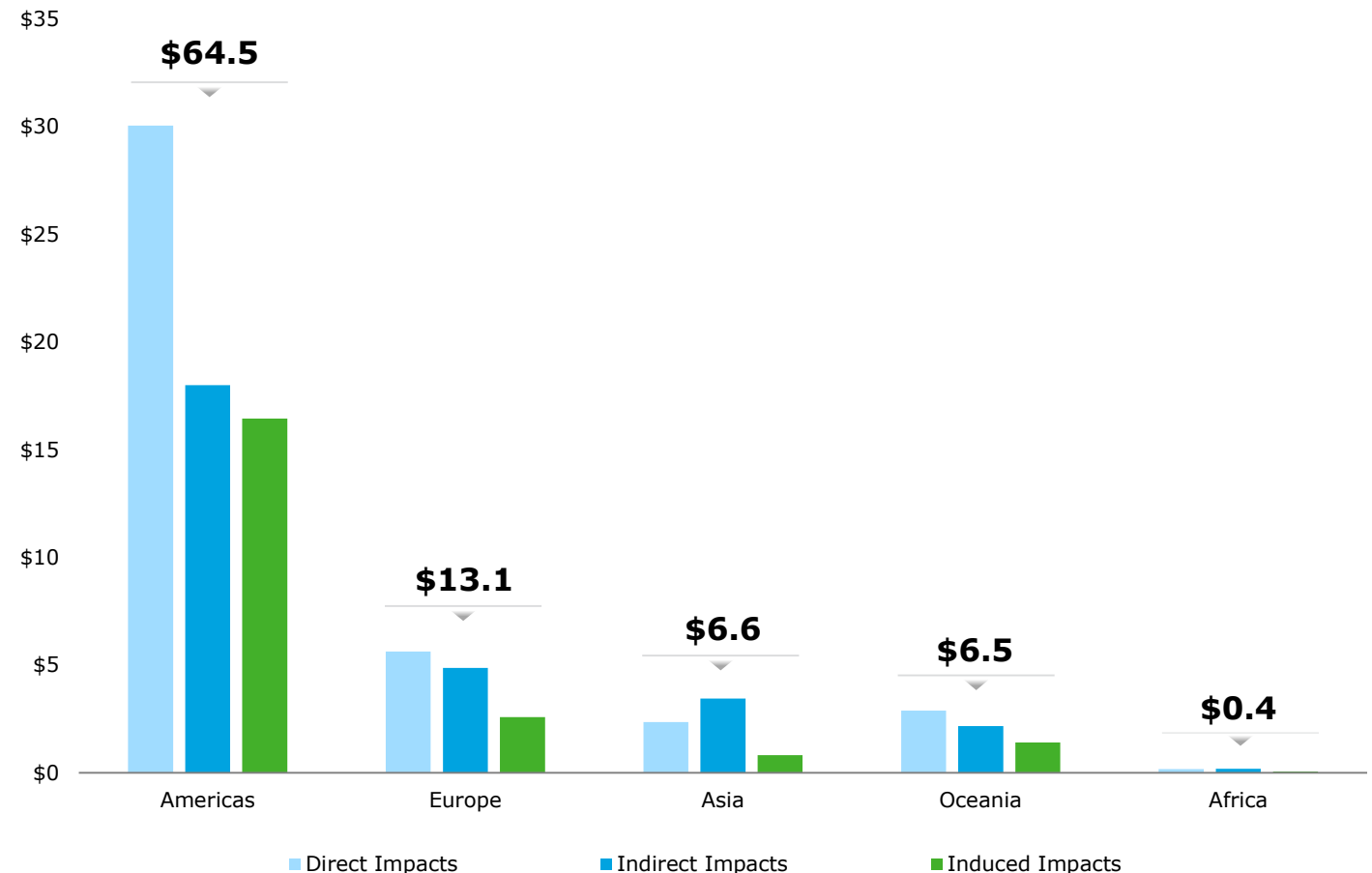
Continent-level economic impact analysis of Shopify's merchant business activity.

We estimate that the Americas account for 70.8% of economic impacts associated with Shopify merchant business activity. When ranking the continents by magnitude of impact, the Americas are followed by Europe (14.4%), Asia (7.3%), Oceania (7.1%), and Africa (0.5%).

Notably, we estimate that Asia's indirect impacts are larger than its direct impacts. This result is driven by Asia's role as a supplier of intermediary goods to merchants via global supply chains.

GDP supported by merchant business activity, by continent

2018, all \$ values presented in USD billions



Shopify's Core Economic Impact

Deep Dive Analysis

Country-level economic impact analysis of Shopify's merchant business activity.

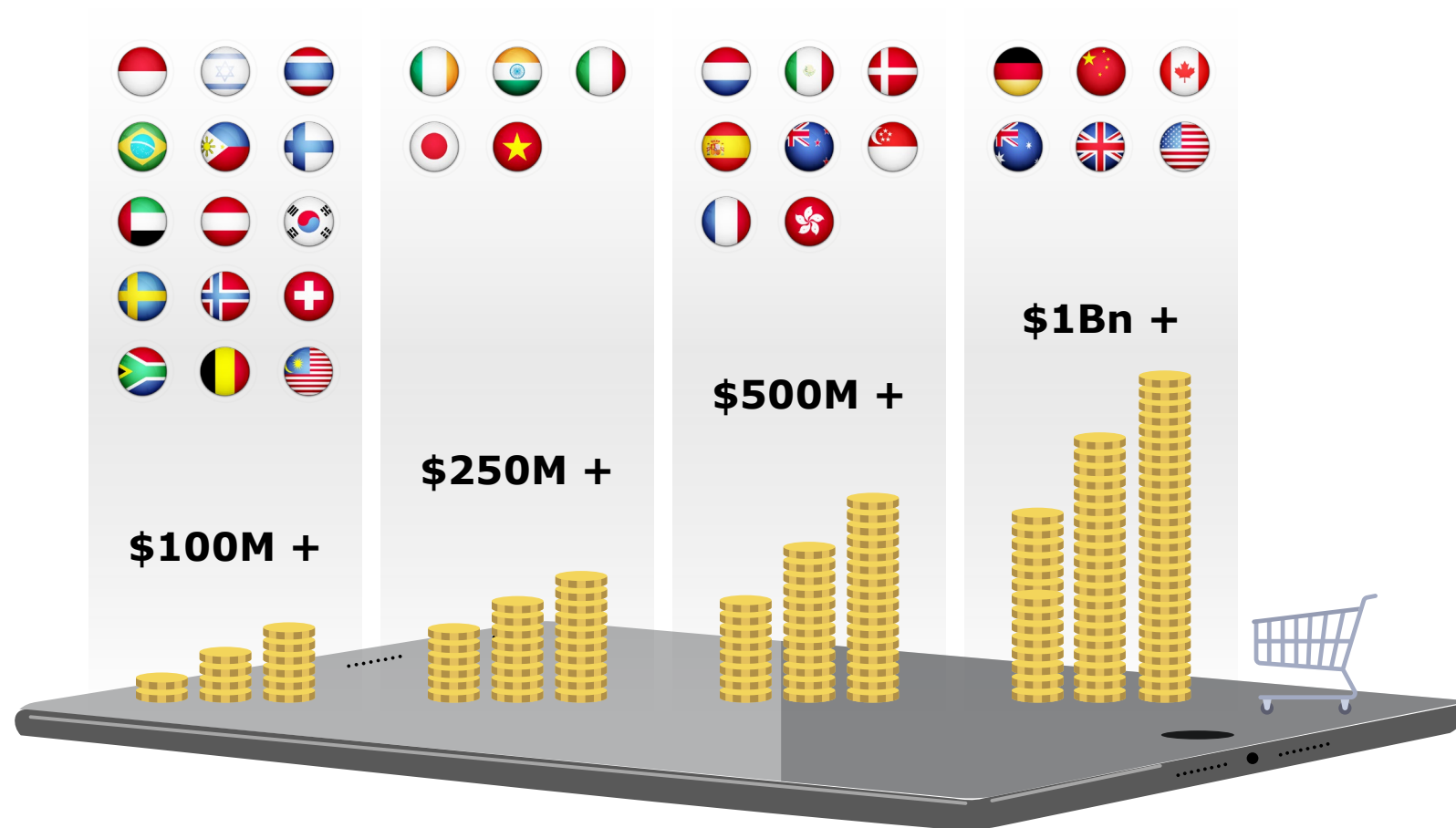
As of 2018, there were over 30 countries in which Shopify merchants support more than \$100 million in GDP contribution. Within this group, the top six countries each experienced over \$1 billion in GDP impact associated with merchant activity, those being the US, the United Kingdom (UK), Australia, Canada, China, and Germany.

Meanwhile, when looking at the 2016 to 2018 period, the top 12 countries each experienced over \$1 billion in GDP impact associated with merchant activity. They were Denmark, France, Hong Kong, New Zealand, Singapore, and Spain, in addition to the six countries listed above.

GDP supported by merchant business activity, by country

2018, all \$ values presented in USD, data limited to countries with over 100 million in GDP impacts

Note: This graphic presents total GDP impacts (i.e., the sum of direct, indirect, and induced).



For context

Sweden's \$204.2 million in direct, indirect, and induced impacts was equal to 7.5% of one month's consumer products sales in the country in 2018.

Similarly, France's \$861.9 million in direct, indirect, and induced impacts was equal to 4.3% of one month's consumer products sales in the country in 2018.

Source: Haver Analytics; Oxford Economics; Deloitte Analysis

Shopify's Core Economic Impact

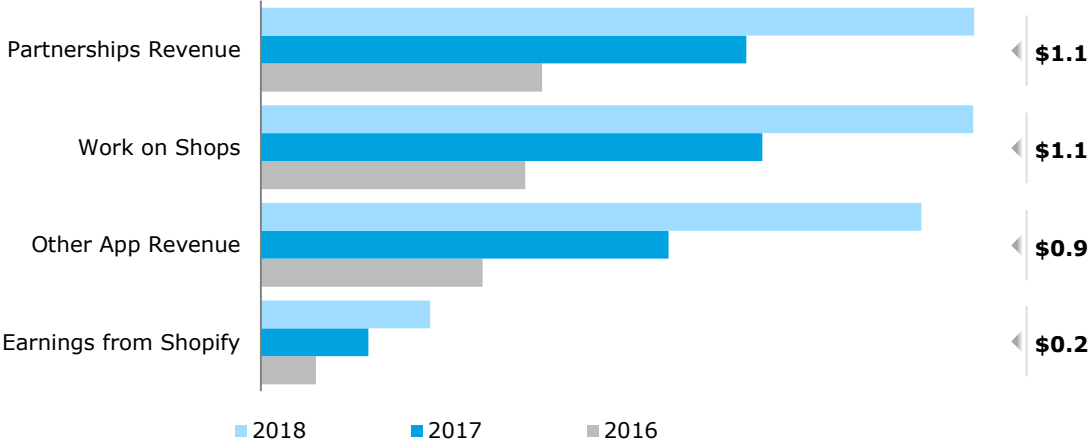
Shopify's vast, global partner network supports a large economic value chain.

In 2018, the global partner network generated nearly \$1.7 billion in estimated sales via four major channels (inclusive of all partner ecosystem activities), having grown from \$1.1 billion in 2017 and \$0.6 billion in 2016.

Moreover, there were over 35,000 development shop referrals and more than 150,000 merchant-partner collaborations in 2018. Several of these partners also operate outside of Shopify's platform, leveraging their services to support other business activity.

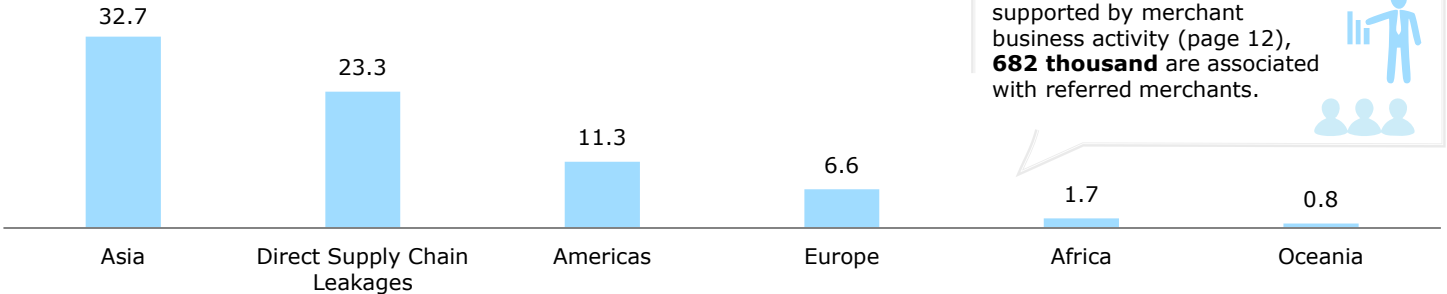
Estimated revenues generated by Shopify partners

All \$ values presented in USD billions



Estimated direct employment supported by partner earnings from Shopify

Employment reported in thousands of FTEs



Note: The direct employment supported by partner earnings from Shopify estimates were generated in a separate analysis (with a different methodology) from our quantitative economic impact analyses of Shopify corporate operations and merchants. The key assumption underlying this analysis is that all revenues earned make up various individual incomes: The revenues generated are accounted for in the supply chains of partners and merchants, or in partners and merchants reinvesting/spending the income earned in the economy.

Shopify's Core Economic Impact

Deep Dive Analysis

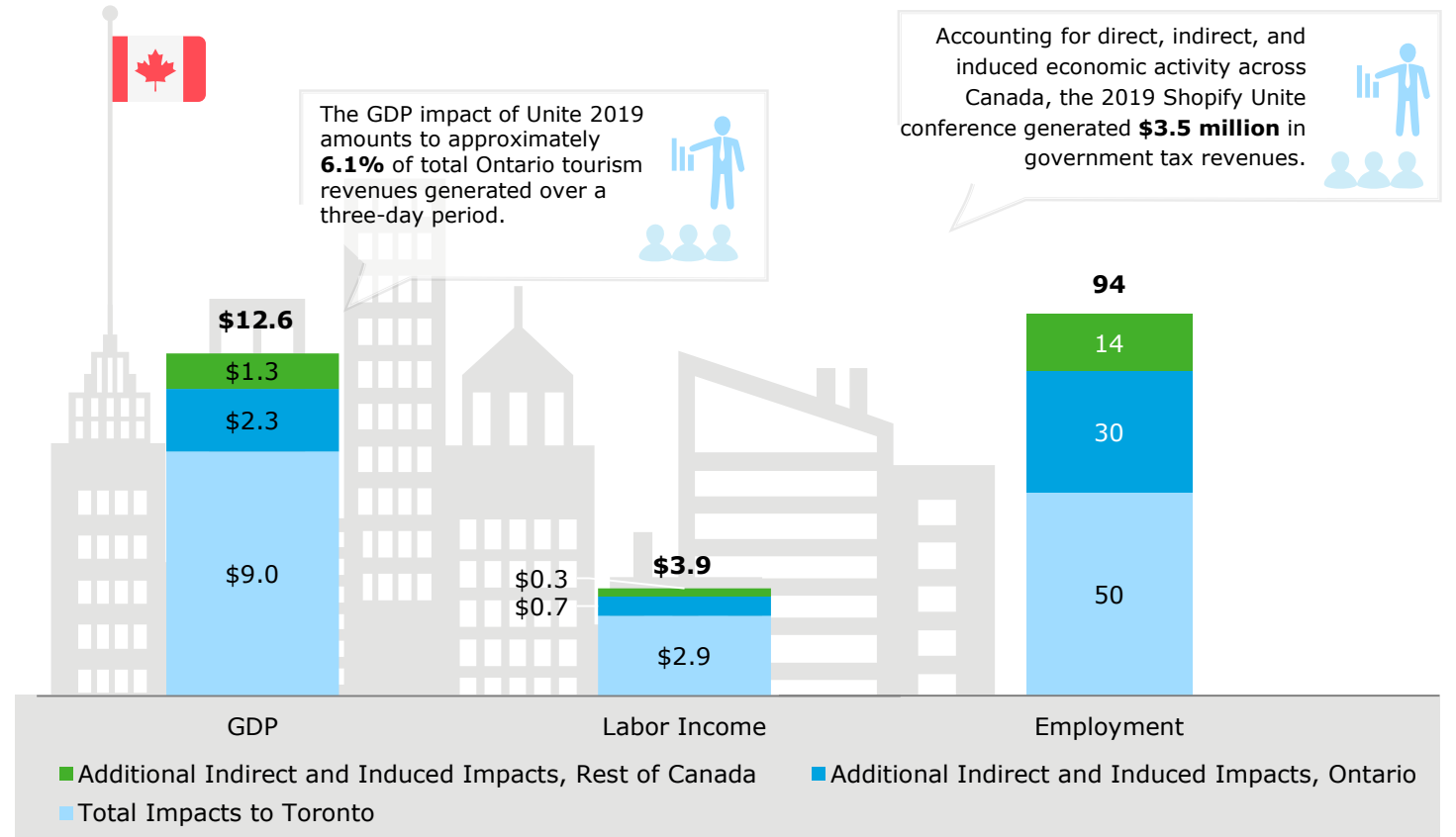
The economic impact of Shopify's Unite conference to Toronto.

In 2019, Shopify Unite brought together over 1,500 attendees from 930 partner businesses in Toronto to make connections, learn from each other, and receive market guidance on merchant trends, new products, and market opportunities.

The three-day conference supports economic impacts in Toronto and across Canada. It is associated with considerable expenditure by Shopify to host the event and visitation expenditures made by the attendees. Nearly 95% of attendees to the conference consisted of travelers to Toronto who incurred spending on the city's hotels, restaurants, transportation, and other businesses.

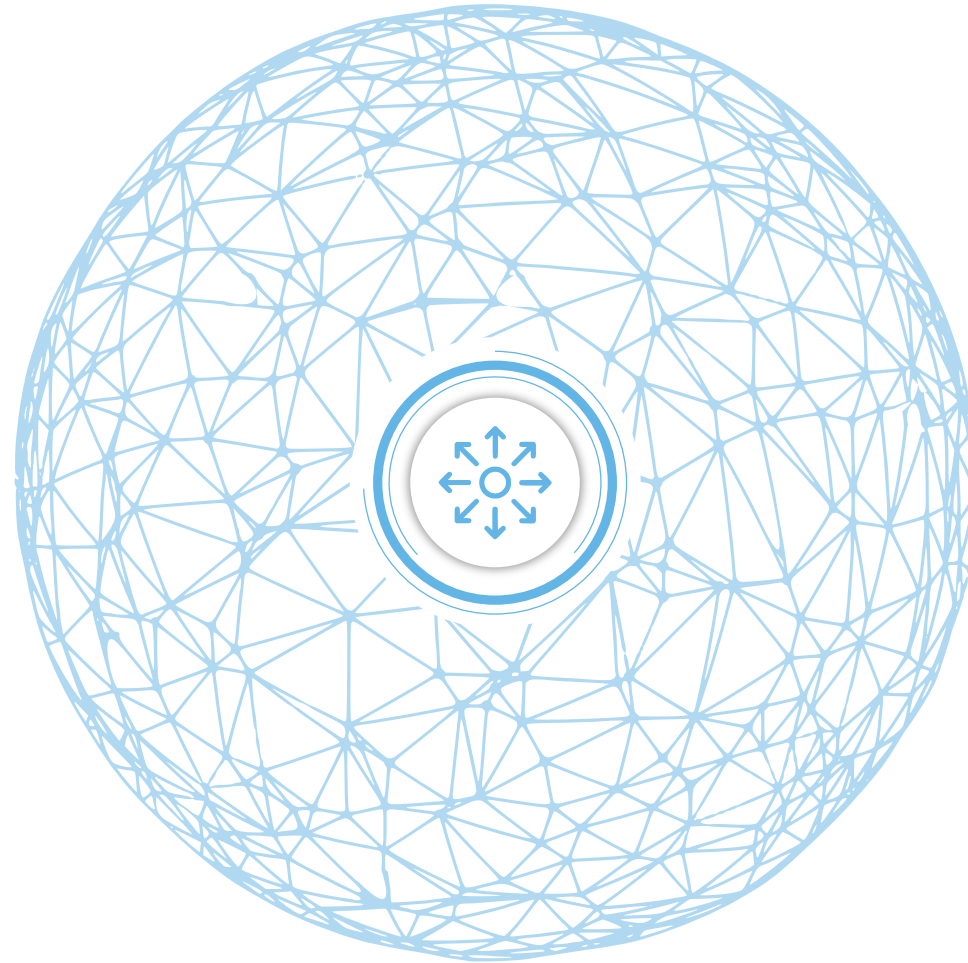
Summary of economic impacts-Shopify Unite 2019

All \$ values presented in USD millions



Note: In a separate analysis from our impact assessment of corporate operations and merchants, we estimated the economic impact of the Unite conference by inputting (i) Shopify expenditure data (specific to the event) and (ii) average tourist expenditure in Toronto data to various relevant Statistics Canada input-output multipliers for Ontario. Toronto level impacts were computed by scaling the provincial level results by relative sector sizes (by employment) at the census metropolitan area level. Our tax estimate is based on the historical relationship between government revenues and economic activity in Canada throughout the different sectors of the economy.

Reducing Business Barriers and Adding Operational Capabilities



Reducing Business Barriers and Adding Operational Capabilities

Shopify reduces business barriers, providing opportunity for entrepreneurs to establish themselves and scale.



Small and medium-sized enterprises (SMEs) play a significant role in the economy. They make up the majority of businesses and they help to fuel innovation and competitiveness through the sale of new products. There is a general consensus among economists that startups and the scaling of SMEs is an integral ingredient for economic growth.

However, launching a successful business is fraught with challenges and risks. Access to capital is among the most prevalent challenges, due to lower financial skills among entrepreneurs, high transaction costs (time and money), and low credit histories, among other obstacles.

Launching a new business also requires managerial and business skills. In today's marketplace, entrepreneurs need a range of competencies across marketing, sales, and digital platforms, in addition to a high degree of skills in developing and delivering what they sell.

Once launched, most SMEs do not survive their first decade. Firms need to scale to thrive and there are many barriers preventing ascension. Most do not overcome the hurdles.

Within this context, our analysis finds that Shopify is a catalytic engine for entrepreneurial activity, scaling businesses, and ultimately contributing to economic growth:

- For a reasonable and accessible cost, Shopify provides a complete tool kit of business services that make establishing and growing a business easier.
- As merchants expand, Shopify's services enhance and add complexity to their operational capabilities. Accordingly, merchants have more time and capital to invest in developing new products, launch in a new market, implement efficiency improvements, or undertake other productive measures.
- Shopify services are provided with scope for customization, which reduces the need for managerial or technical talent. Merchants can leverage the expertise of Shopify and its partners.
- Globally, smaller and newer businesses have lagged in adopting digital technologies. Shopify provides digital capability to firms that otherwise might have difficulty accessing, leveraging, affording, or building such technical capabilities.
- Shopify's tool kit enables merchants to scale in non-local markets, a benefit that will be addressed further in the "Supporting Borderless Commerce" chapter.

Reducing Business Barriers and Adding Operational Capabilities

Shopify provides fundamental business services at a low cost.

Shopify provides various core business services to support merchants across all stages of their commercialization cycle—from start to marketing, selling, and managing.

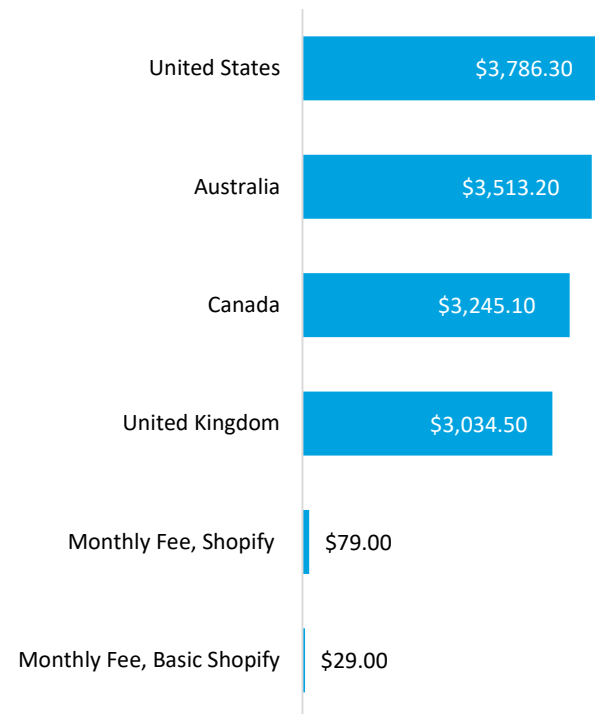
Importantly, Shopify services are available at an accessible cost. At \$29 per month, the Shopify Basic subscription amounts to less than two hours' wage for the median worker in advanced economies, such as the US, Australia, Canada, and the UK.

Broadly speaking, the cost of doing business has been a barrier that prevents entrepreneurs from entering the marketplace. Shopify mitigates this issue by providing business-enabling services for a low subscription fee.

Shopify subscription plan and median monthly wages

Median wage data presented in 2017 USD (most recent).

Note: A Shopify subscription does not address all requirements or costs for starting a business (e.g., material and equipment, legal services, etc.).



Source: OECD; Shopify; Deloitte Analysis

Services available to all Shopify subscribers



Reducing Business Barriers and Adding Operational Capabilities

Shopify services address several operating costs associated with retail businesses.

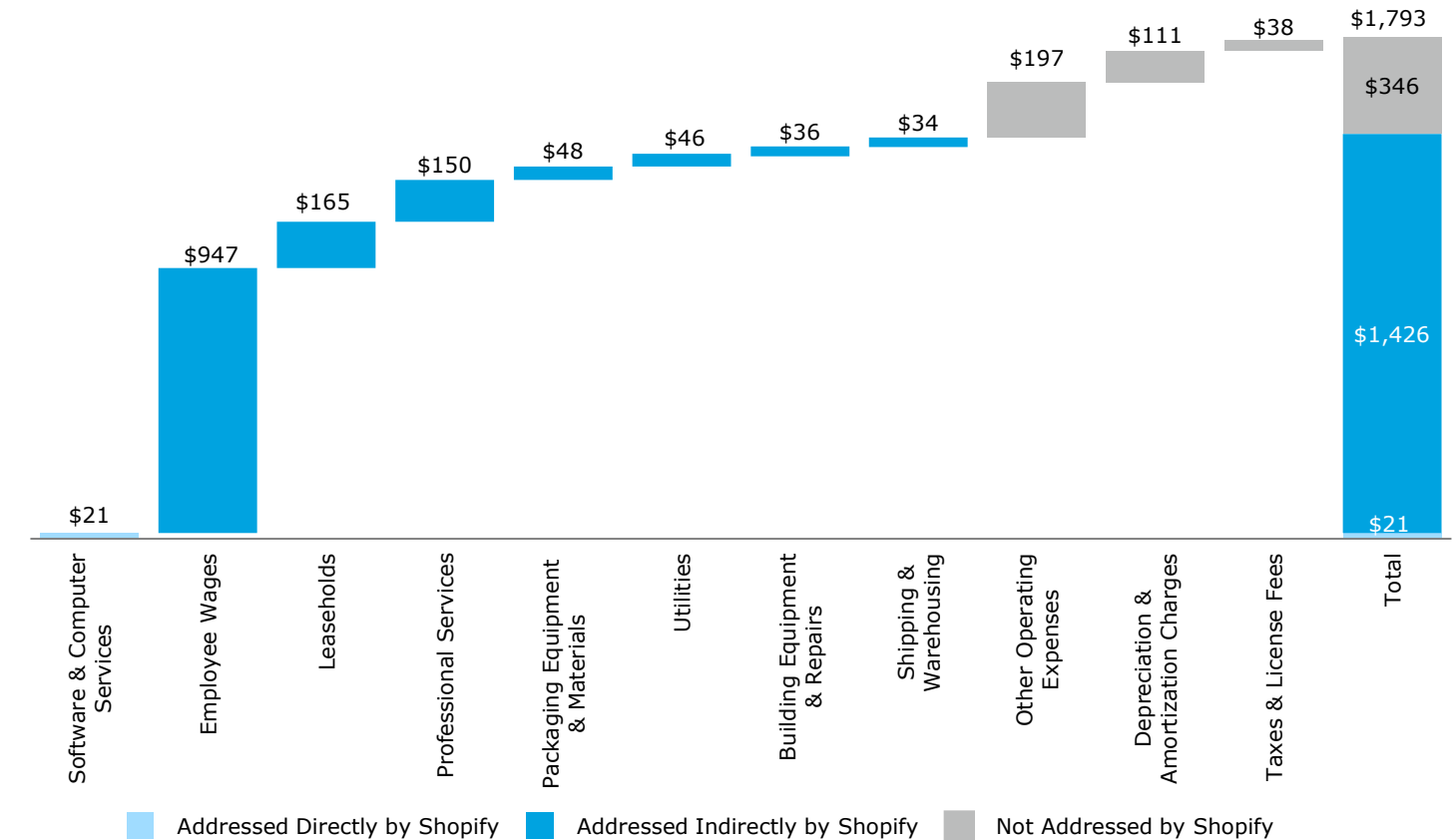
The services available via Shopify subscriptions address many of the operating costs incurred by retail businesses. Given that Shopify fees are low, it follows that merchants are relieved (at least partially) of certain operating expenditures that they may have faced otherwise.

For existing market participants, this benefit has the potential to increase profitability and free-up capital for investments in innovation and productivity, which in turn fosters a more competitive marketplace.

For new market participants, the low-cost subscription fee reduces the risk profile to start a business. Specifically, entrepreneurs can enter the marketplace, test new business ideas, or operate a store part time without significant financial requirements – outcomes that are associated with second-order benefits of greater innovation and productivity.

Average annual operating expenditures of US retail businesses

2017 (most recent year), all \$ values presented in USD thousands



Source: United States Census Bureau

Note: To be sure, other operating expenses includes some costs addressed by Shopify, such as advertising and promotional services and communication services. Since the data cannot isolate only the "other operation expenses" addressed by Shopify, we did not categorize this cost as directly or indirectly addressed by Shopify.

Reducing Business Barriers and Adding Operational Capabilities

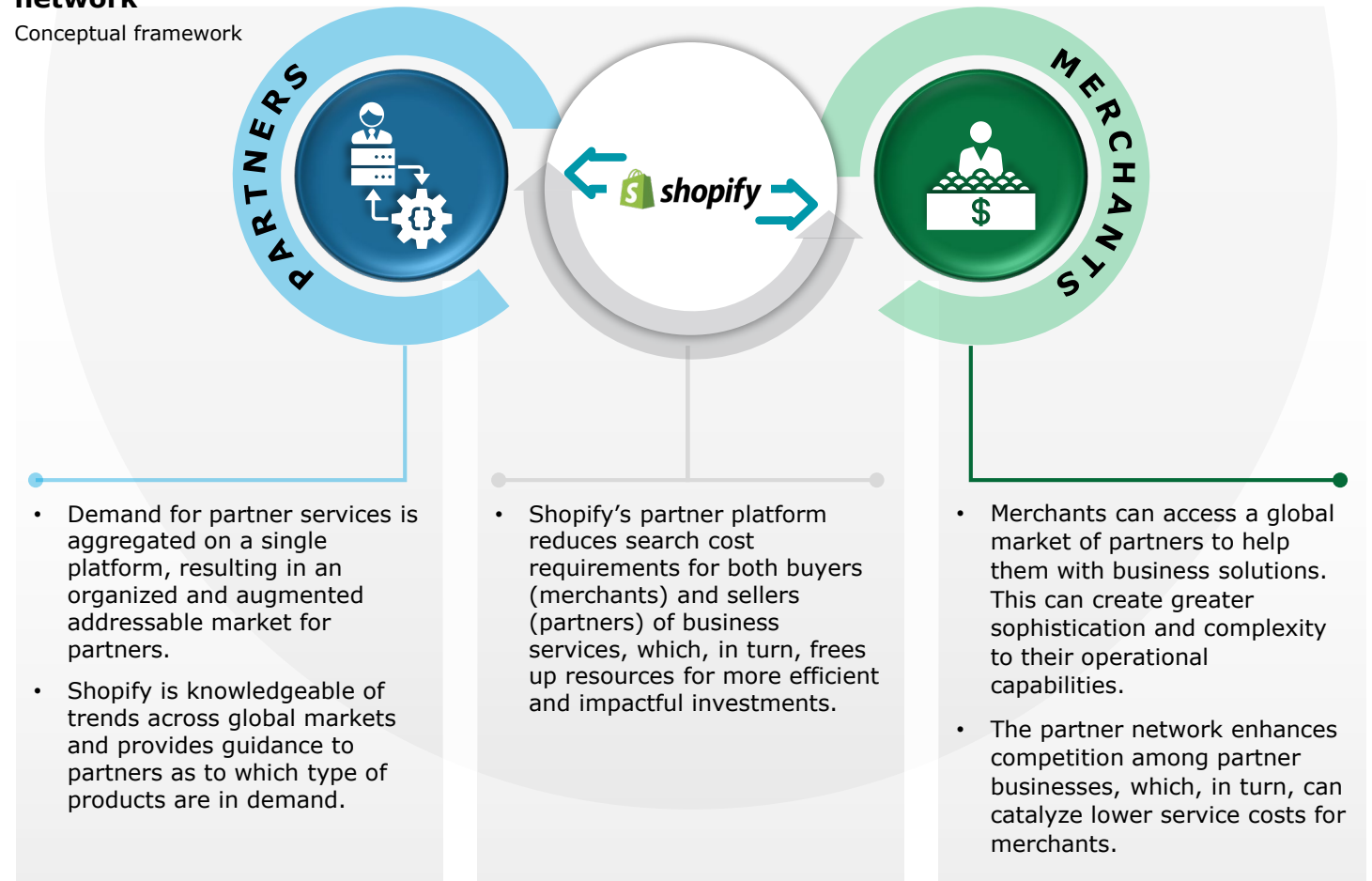
As a platform, Shopify helps partners and a global marketplace of entrepreneurs to connect.

Shopify aggregates merchant demand for services and products, such as themes and apps, onto a single platform, resulting in an organized and augmented addressable market for partners.

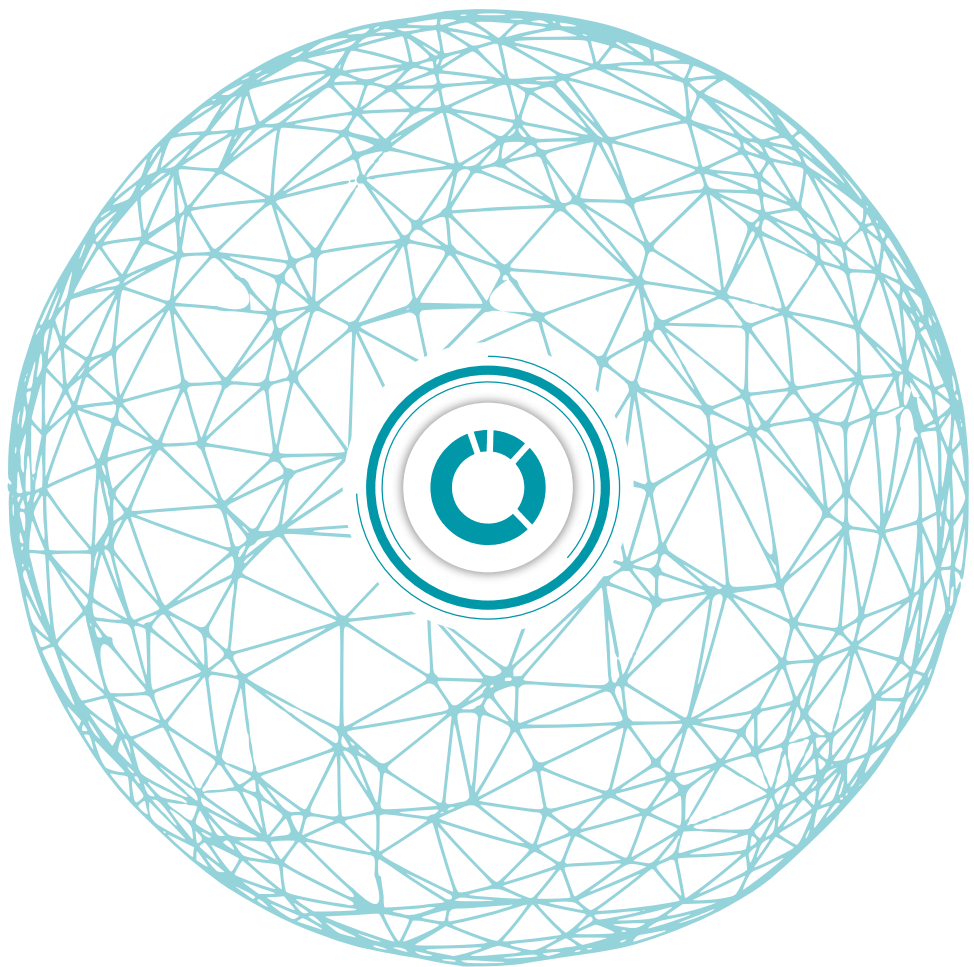
Meanwhile, a greater degree of competition among partners provides benefits to merchants, as competition is a catalyst for lower prices and higher quality products.

Benefits achieved by partners and merchant businesses, through Shopify's partner network

Conceptual framework



Supporting Borderless Commerce



Supporting Borderless Commerce

Shopify facilitates access to new markets for its merchants and partners.



A common constraint to business growth—especially among SMEs—is excessive exposure to local markets. This dependency limits the customer market size for merchants and puts them at risk of negative macroeconomic shocks, among other challenges.

Economic studies illustrate that export-oriented businesses commonly experience stronger revenue growth and are more innovative and productive due to greater competitive pressures. This is why many governments strive to incentivize trade activities: when domestic firms export, it is expected that, innovation, productivity, and aggregate sector growth will follow.

In the existing macroeconomic climate, the prospect of greater trade opportunities is especially welcome. Globalization is facing headwinds and protectionism is dampening international trade. Although economists broadly expect these trends will pass with time, innovations that can support and even drive export activity are currently in demand.

This background underscores the significance of Shopify as an enabler of international trade activity. In the data, we find that Shopify has supported growth in exports across its networks of merchants and partners.

Many of the mechanisms through which Shopify enables global trade are similar to those described in the “Reducing Business Barriers and

Adding Operational Capabilities” narrative: for a reasonable and accessible cost, Shopify provides a complete tool kit of business services that make establishing a business, competing, and scaling easier.

Yet there are specific services that come to mind when dissecting how Shopify promotes access to non-local markets, such as:

- Shopify provides ecommerce capabilities, empowering businesses to access new non-local markets without the requirement of a physical presence.
- Merchants can access non-local market information and customize to the diverse needs of consumers abroad. Shopify’s various administration languages account for over 95% of the global population.¹
- Shopify provides tools and makes third-party applications available to help businesses navigate transportation, logistics, and fulfillment.
- From a partner perspective specifically: in aggregating merchants worldwide onto a mutual platform, partner businesses may develop products that have utility globally.

¹ Shopify administration languages include English, French, German, Spanish, Italian, Portuguese, Dutch, Danish, Swedish, Norwegian, Finnish, Japanese, Traditional Chinese, Simplified Chinese, Korean, Hindi, Malay, Thai, Brazilian, and Portuguese.

Supporting Borderless Commerce

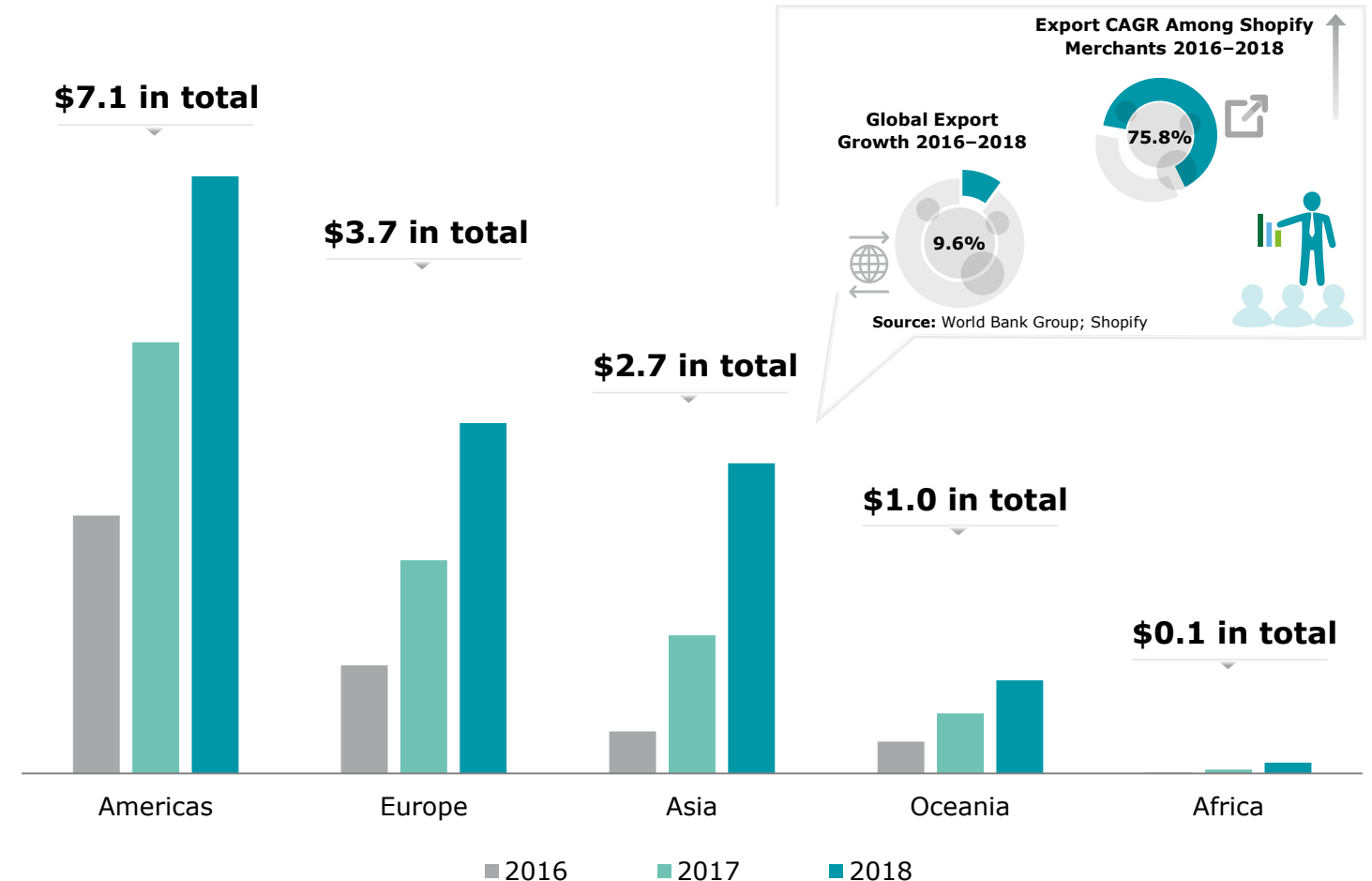
The value of international sales made using Shopify is growing across all continents.

Consistent with general increases in merchant business activity, the compound annual growth rate (CAGR) of international sales made through Shopify increased by 75.8% globally between 2016 and 2018.¹ International sales made through Shopify accounted for 18.3% of total sales made through Shopify in 2018.

This growth is notable given the current global slowdown in international trade: amidst a period in which import-export activity has stalled, Shopify merchants are increasingly selling in foreign markets.

Annual value of exports generated by Shopify merchants, per continent

2016-2018, all \$ values presented in USD billions



¹ In this study, international sales (also referred to as exports) are defined as sales in which the seller is located in a separate country jurisdiction from the buyer.

Supporting Borderless Commerce

Across the world, Shopify has helped small businesses to sell in markets abroad.

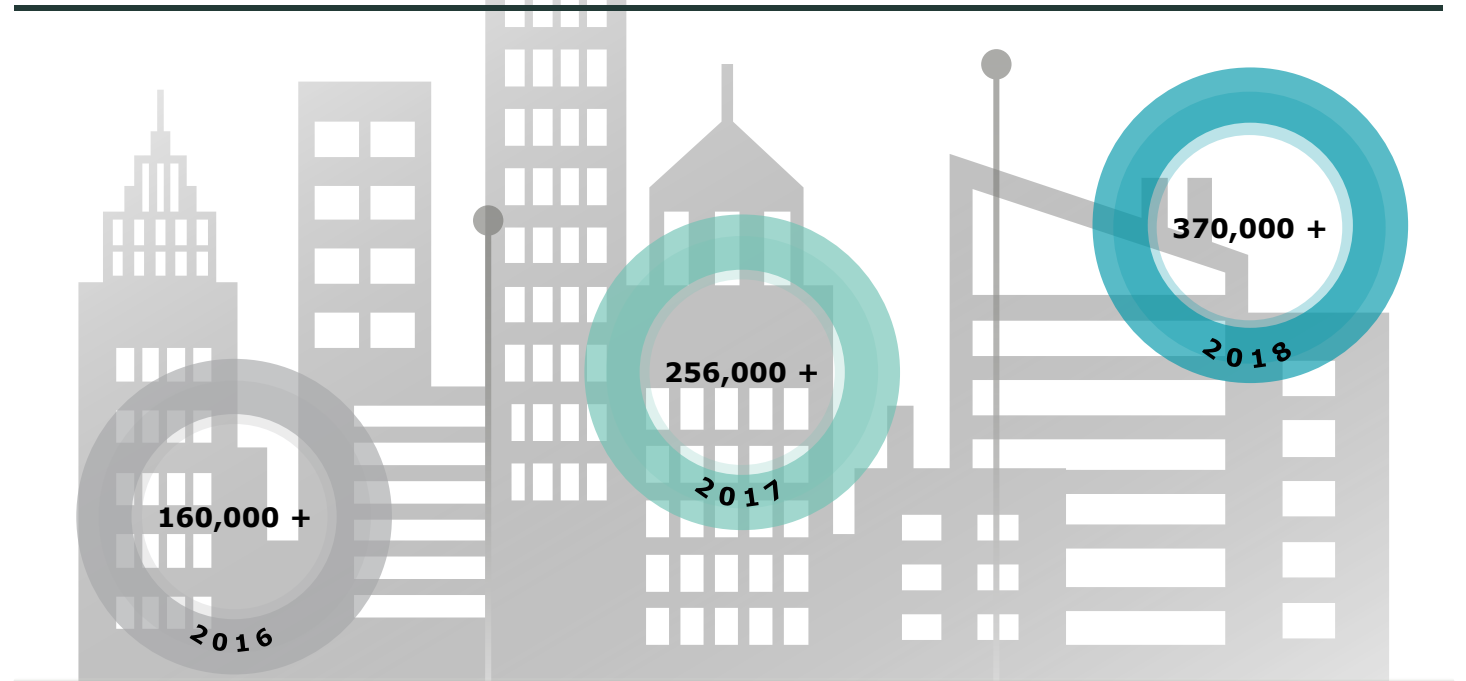
Due to multi-faceted challenges, small businesses struggle to compete and scale in markets abroad. Consequentially, the potential for small businesses to grow may be limited to their local market size and local macroeconomic conditions.

Shopify helps to resolve this challenge. The data illustrates that an increasing number of small businesses are using Shopify to access foreign markets and make international sales.

This development delivers economic benefits to consumers, too, as customers of Shopify merchants may access non-local products and better prices arising from more competitive international markets.

Annual count of small businesses that made international sales using Shopify

2016-2018



Supporting Borderless Commerce

Shopify enables access to consumers in continents overseas and in nearby states.

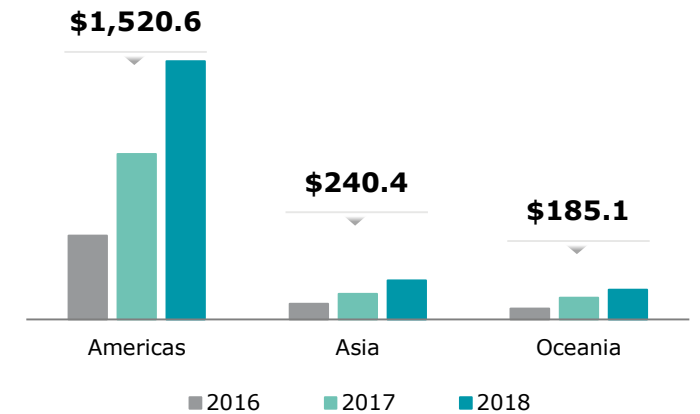
Using Shopify, merchants are empowered to overcome cultural and geographic barriers to reach new customers in foreign countries and continents.

Yet accessing new markets does not only refer to export activity. It can also refer to accessing non-local markets that are domestic. For example: US merchants do not engage in international trade to the same degree as merchants in other regions. Yet the data illustrates that Shopify enables a dynamic web of trade across state borderlines.

Annual cross-continental exports by Shopify merchants in Europe

2016–2018, all \$ values presented in USD millions

European-based Shopify merchants generated approximately \$1.9 billion in sales to jurisdictions outside of the continent (17.9% of total merchant revenues generated in Europe, and 52.6% of total merchant exports).

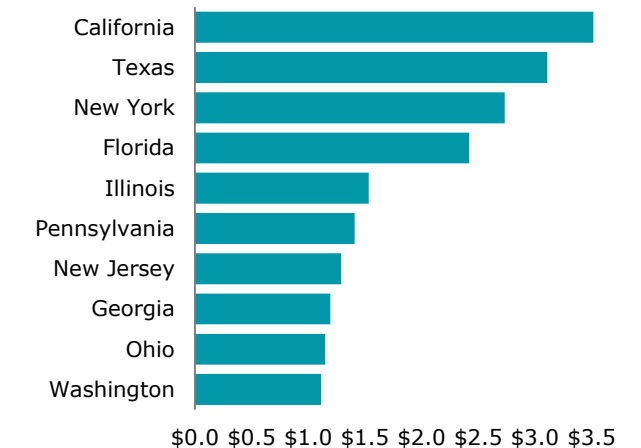


Top 10 US states, by consumption of domestic Shopify merchant products

2016–2018, all \$ values presented in USD billions

US-based Shopify merchants tend to conduct proportionately less international trade than merchants outside the US, with 9.3% exports as a share of total revenues generated.

Nevertheless, the data illustrates that Shopify enables a dynamic web of trade across state borderlines. Between 2016 and 2018, Shopify enabled US-based merchants to generate approximately \$10.5 billion in sales to consumers in a different state—nearly half of total sales.



Supporting Borderless Commerce

Through Shopify, there is significant engagement between partner businesses and foreign merchants.

Shopify enables engagement between partner businesses and merchants at a global scale.

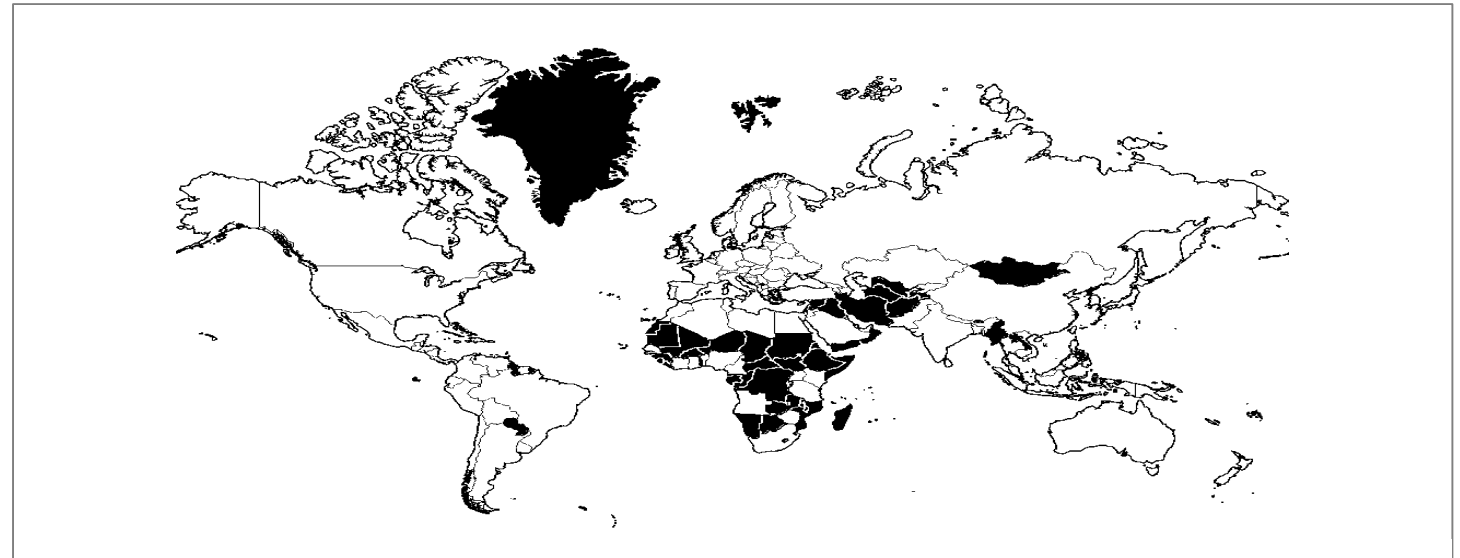
This worldwide network helps to generate positive economic impacts in both the partner and merchant markets:

- Partners can access new markets by supporting merchants.
- By trading with Shopify partners, foreign merchants have access to new products and competitive prices for goods they can sell on to their customers (whether they are businesses, governments, or households).
- From an economic perspective, the gains from trade are agnostic of whether it is business-to-customer or business-to-business transactions.

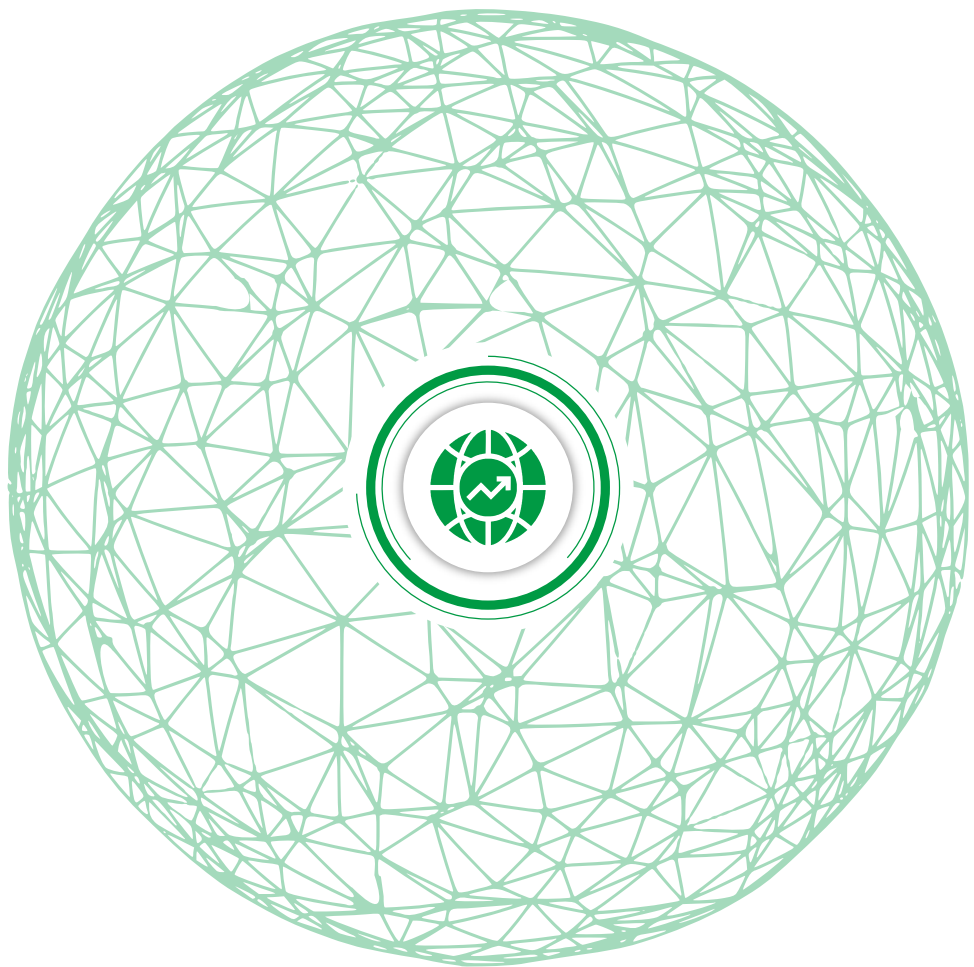


Countries with partners that referred merchants from a foreign jurisdiction

2018



Broadening Global Growth



Broadening Global Growth

Shopify enables broader, healthy economic growth across all geographic regions.

A key macro-level challenge at the moment is the broad-based slowdown in global economic growth. This is tempering economic development in emerging countries and acting as an obstacle to achieving higher living standards in advanced countries.

There are also unfavorable second-order impacts. Slower economic growth may exacerbate the problem of income inequality, a fault-line issue across developed countries that is driving negative economic and social outcomes. This may occur if limited economic gains are increasingly captured by a minority in society. Simultaneously, slow income growth makes managing income inequality more difficult for governments, as they have less scope for income redistribution through public programs and taxes.

As an additional consequence of the broad-based slowdown in economic growth, regions that have witnessed industry losses, due to globalization and technological advancements, among other macro-trends, struggle to generate new employment opportunities.

In response to these macro forces, many governments and international agencies have adopted the viewpoint that *inclusive* economic growth, shared by all social groups and regions, must be a key priority. Yet, in addition to good policy, private sector innovations are also

required to generate market activity and provide opportunities across all populations.

As a complete commerce platform, Shopify helps to create broad and inclusive economic opportunities, specifically:

- By removing business barriers, Shopify empowers resource constrained entrepreneurs to enter the marketplace.
- By enabling ecommerce, Shopify helps to reduce the importance of location. This benefits merchants and partners operating in smaller markets, whether they reside in rural areas of advanced countries or in emerging countries where there may be low levels of economic activity.
- Shopify merchants/partners and their staff can be from any gender, ethnicity, or background (e.g., country), which helps to level competition and empower any entrepreneur to launch a business and scale.



Broadening Global Growth

Shopify enables merchants from emerging countries to trade.

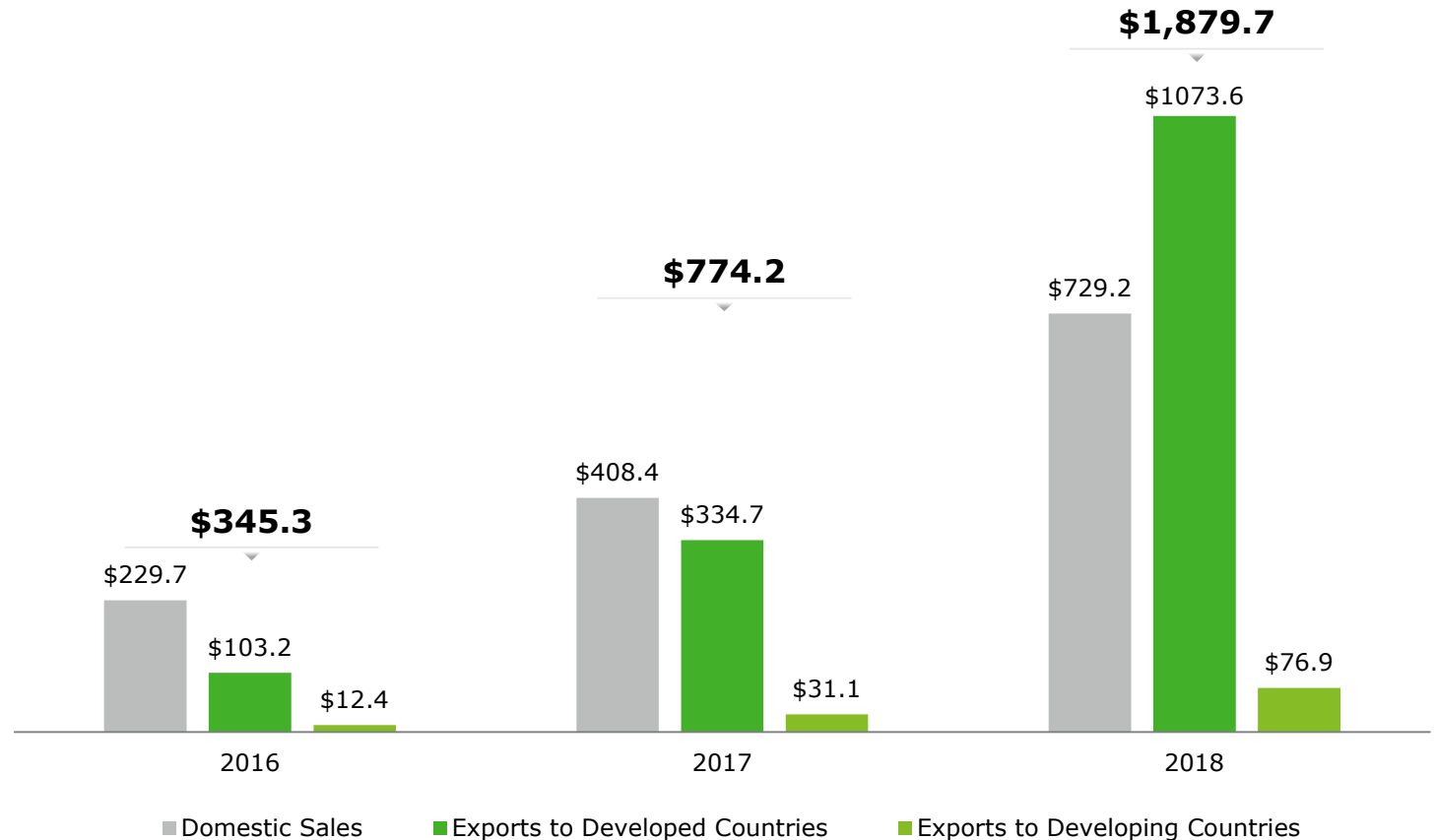
Between 2016 and 2018, Shopify merchants in developing countries generated over \$3.2 billion in revenues. Over this period, nearly half of these sales were made as exports to consumers in the developed countries.

In 2018, 93.3% of export sales made by Shopify merchants in developing countries were exports to advanced economies. For context, the global average of exports from developing economies to advanced economies is approximately 64.8%.

This data highlights how Shopify supports a flow of funds from wealthier, advanced economies to emerging countries—economic activity that helps to promote global economic development in emerging markets and contributes to reducing global inequality.

Breakdown of sales made by merchants in developing countries

2016-2018, all \$ values presented in USD millions



Note: The discrepancy between the total in this chart (approximately \$3.0 billion) and the total reported in the text left (“over \$3.2 billion”) is driven by missing customer geo-location data (e.g., unknown whether they are domestic, based in a developed country, or based in a developing country). The absence of this data is unlikely to alter the overall directionality and output of this chart.

Broadening Global Growth

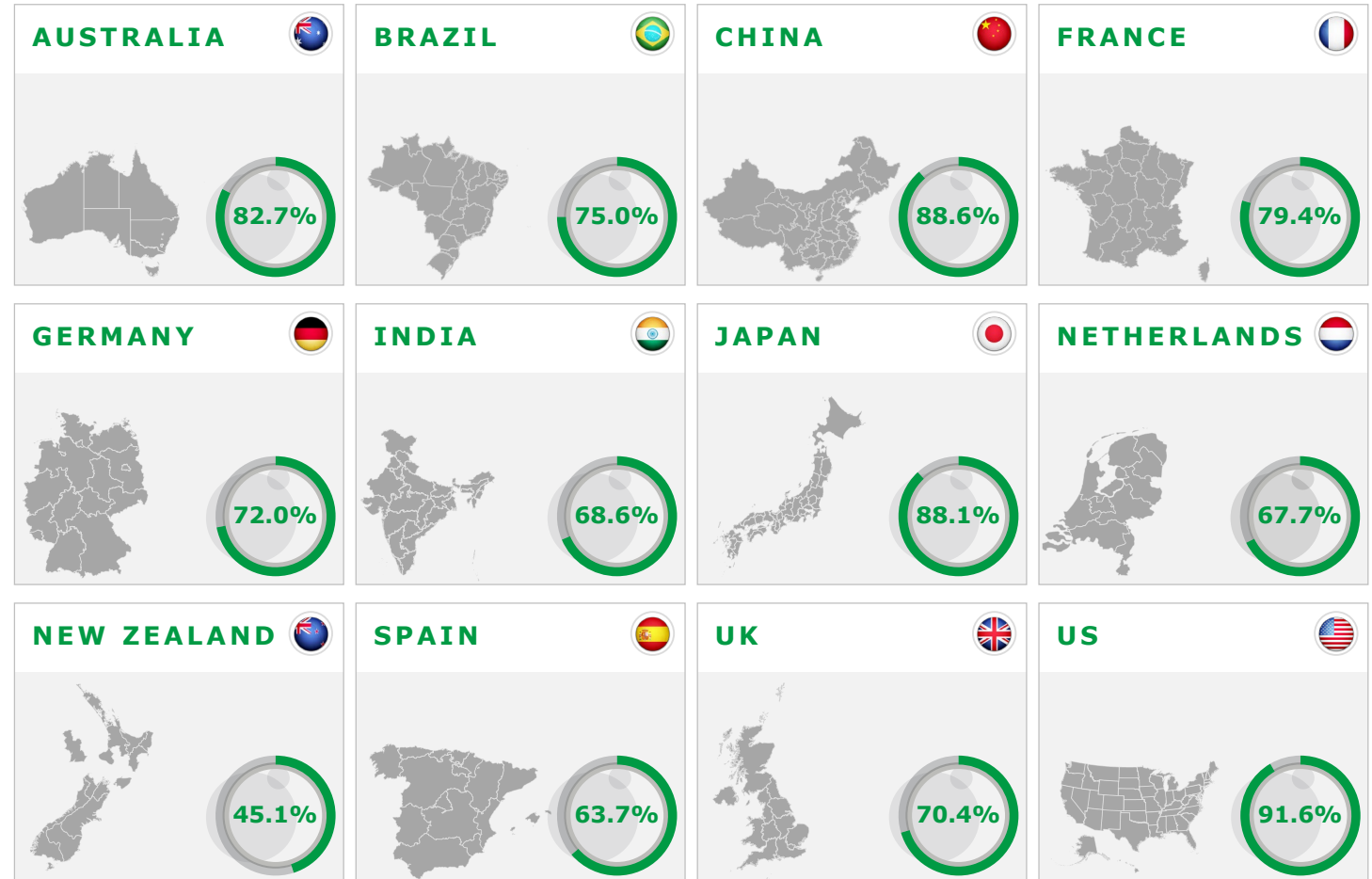
Shopify supports thousands of merchants operating outside of major urban areas.

By providing a multi-channel commerce platform, a broader set of entrepreneurs can access resources to establish a business and markets to scale.

The data illustrates that, across the world, a sizable percentage of Shopify merchants are operating outside of major urban areas.

Percentage of merchants operating outside of their country's top five most populous cities

2018, by select countries



Broadening Global Growth

Shopify hosts a vast network of partners across emerging economies.

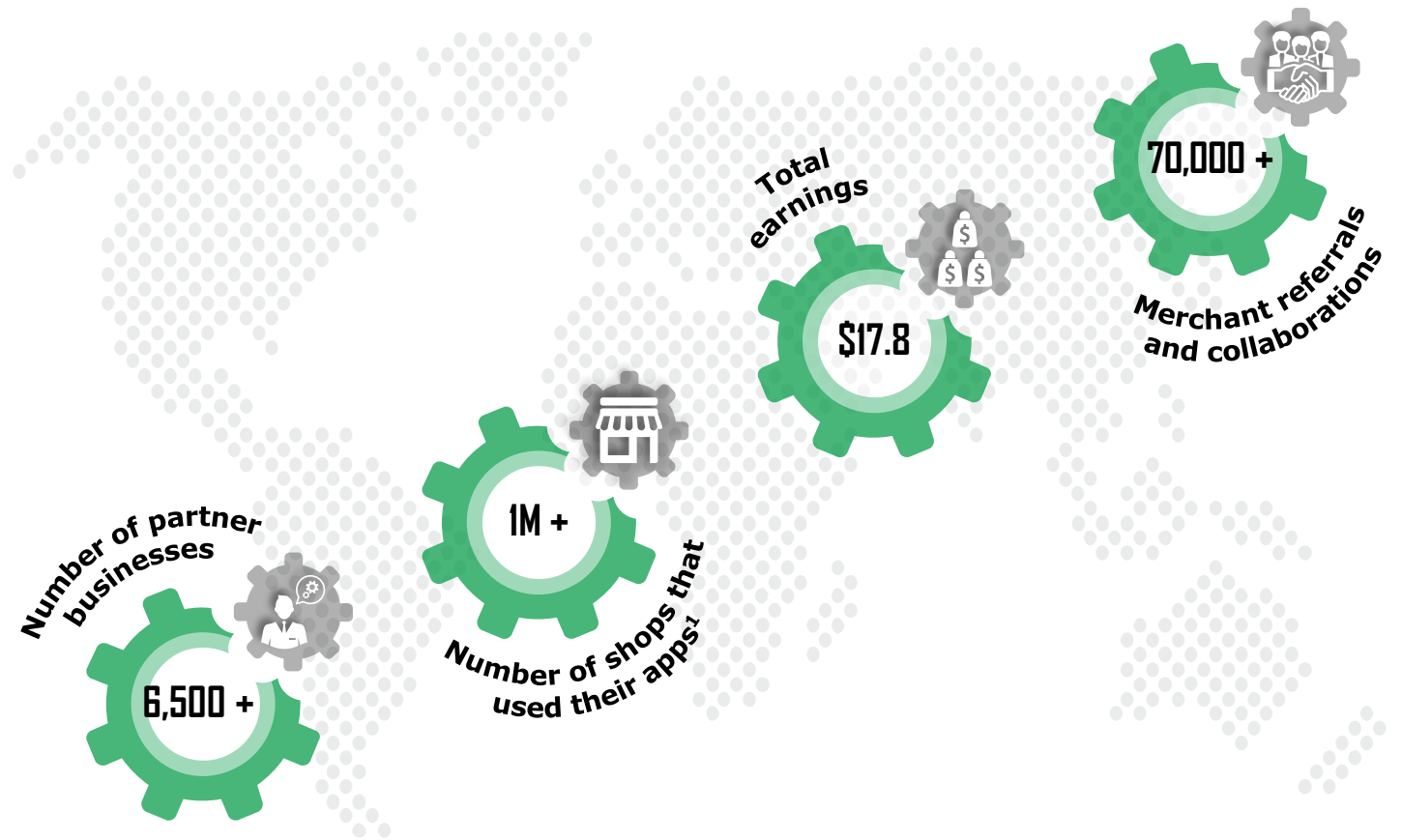
Since 2018, there were over 6,500 Shopify partners operating in developing countries across the world—this amounts to 20.2% of all Shopify partners in 2018. This count of partner businesses has grown nearly four times since 2016.

Shopify partners in developing countries have driven significant economic activity, with their earnings estimated at \$28.8 million between 2016 and 2018.

This data highlights how Shopify helps to provide good job opportunities in emerging countries. Across these economies, the industry makeup is transforming from goods-producing sectors to more advanced-services oriented sectors, such as the partner industries of software and design.

Summary of partner activity in developing countries

2018, all \$ values presented in USD millions

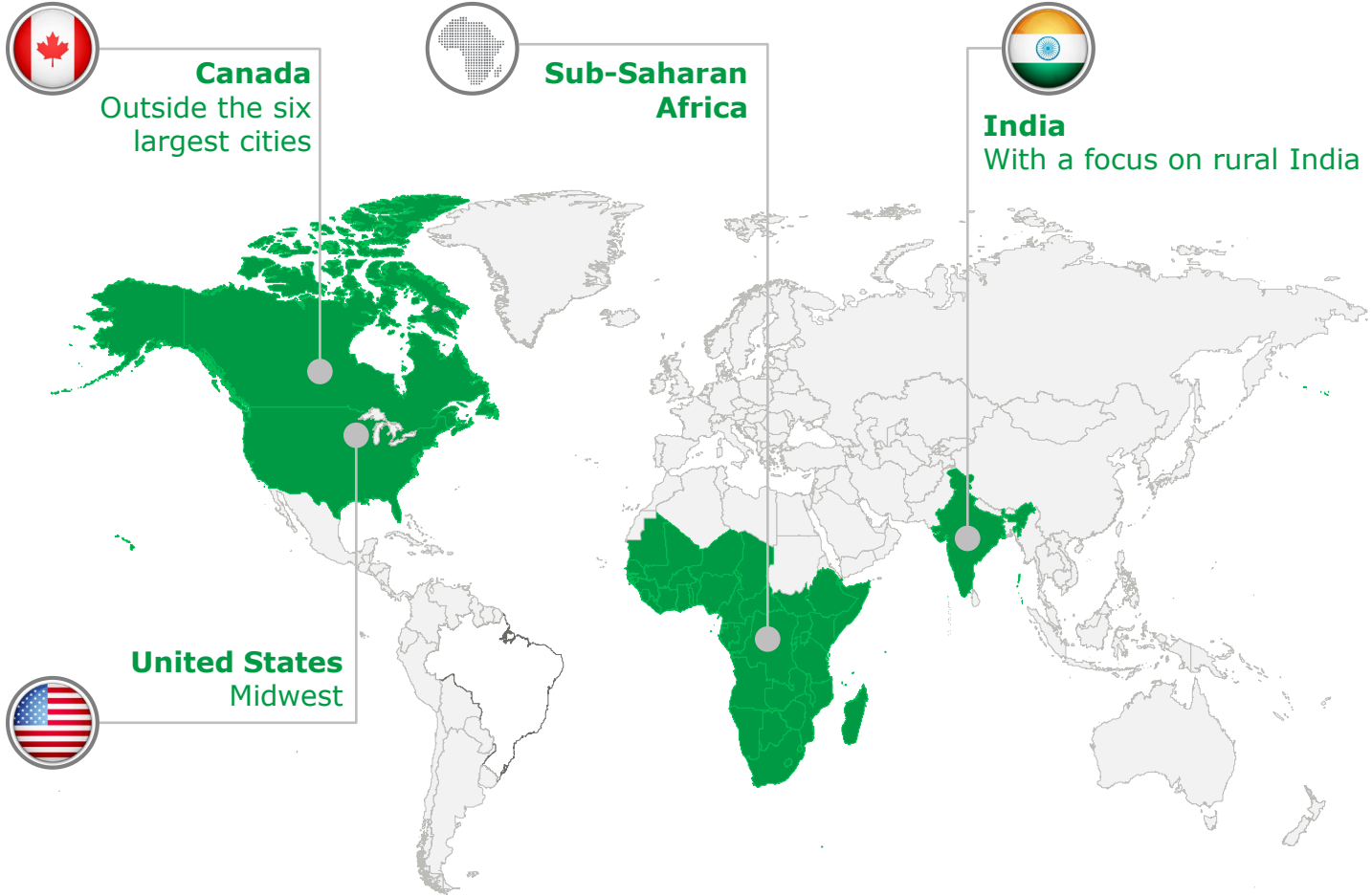


¹This value may include a merchant more than one time if they use apps from more than one partner. For this reason, the 1M+ value exceeds the total number of merchants.

Broadening Global Growth

Shopify empowers entrepreneurship in areas facing macro-level challenges.

To research this, we conducted four deep dive analyses in jurisdictions that face structural economic challenges, such as industry transformation, migration, and more. These jurisdictions span the globe, from urban areas of the United States Midwest region to sub-Saharan Africa.



Broadening Global Growth

Deep Dive Analysis

Contributing to Economic Growth and Development—US Midwest

Region Context

The US Midwest has experienced solid economic growth since the recovery began in 2009. However, the region has a concentration in manufacturing, which may be a weaker contributor to economic growth over time. Rural economies in the region have also lagged the major urban centers in terms of growth.

Fueling Regional Entrepreneurship

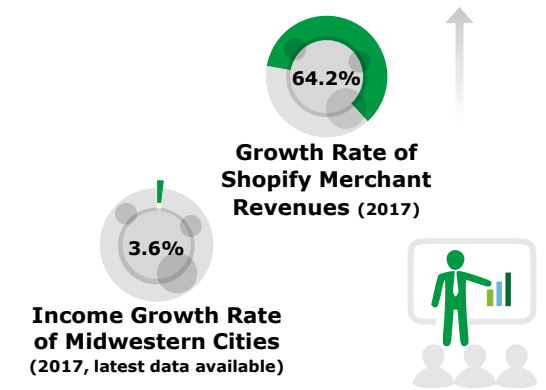
Shopify has enabled merchants in the US Midwest region to generate over \$5.5 billion in revenues from 2016 to 2018, including \$336.8 million in exports.

Industrial Midwest Analysis

In 2018, Shopify hosted over 30,000 merchants in the Midwest's largest urban industrial areas (excluding Chicago).

Additionally, between 2016 and 2018, the revenue growth generated by Shopify stores typically grew much faster than their respective cities. This data suggests that Shopify plays a role in creating new opportunities and industry transformation in the industrial Midwest.

Average growth rate of Shopify merchants in the Midwest's largest urban industrial areas (excluding Chicago)



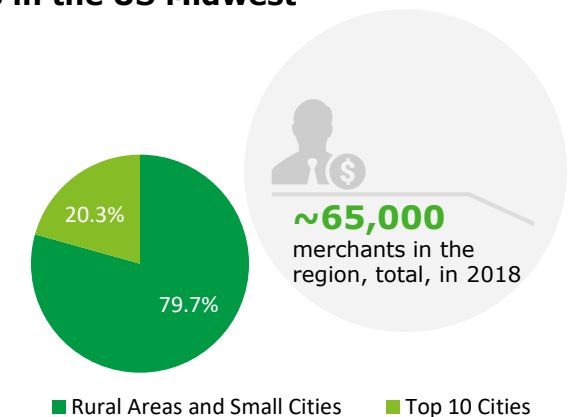
Source: Bureau of Economic Analysis

Rural Areas and Small Cities Analysis

Shopify merchants residing outside of the Midwest's 10 largest cities account for 79.7% of all merchants in the region.

Collectively, the merchants residing outside of the Midwest's 10 largest cities generated \$4.3 billion in sales between 2016 and 2018.

Merchant counts in rural areas and top 10 cities in the US Midwest



Broadening Global Growth

Deep Dive Analysis

Contributing to Economic Growth and Development—Canadian smaller cities and rural areas

Region Context

Economic growth is increasingly concentrated in Canada’s largest urban centres. Smaller cities and rural areas have participated less in the economic expansion since 2009. Less than 20% of Canadian SMEs are located in rural areas, and Canadian rural exports account for 3.7% (\$15.5B) of total exports.¹ The federal government and provincial governments have been looking for ways to broaden economic growth and support disadvantaged regions.

Fueling Regional Entrepreneurship

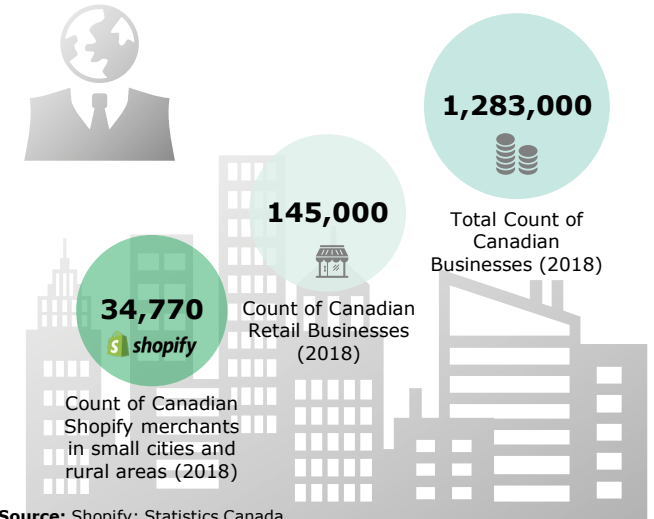
Shopify has enabled merchants in Canada, outside of the six largest urban centers, to generate \$3.1 billion in revenues from 2016 to 2018, including \$1.0 billion in exports.²

¹ Source: Statistics Canada

² The six largest urban centres in Canada are Calgary, Edmonton, Montreal, Ottawa-Gatineau, Toronto, and Vancouver.

Helping to Establish a Large Number of Canadian Stores

There are over 34,000 merchants subscribed to Shopify in Canada outside of the six major urban centers—this is 64.4% of all Shopify merchants in Canada. This is a sizable number when considering the total counts of Canadian businesses (see graphic to the right).



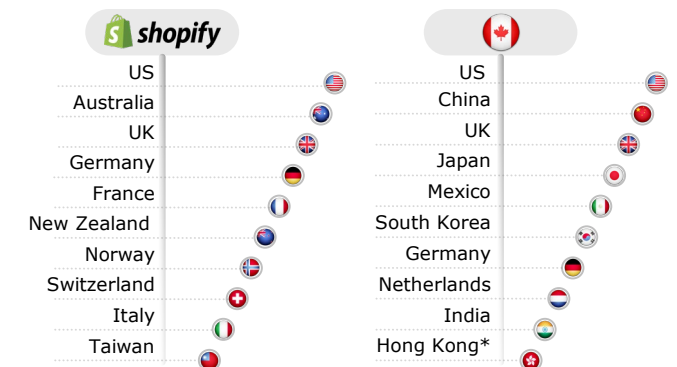
Source: Shopify; Statistics Canada

Diversifying Bilateral Trade

Between 2016 and 2018, Canadian Shopify merchants outside the country’s six major urban centers generated \$1 billion in exports to 248 foreign jurisdictions.

The mix of countries these entrepreneurs sell to helps to diversify export activity, which is not only beneficial to smaller cities and rural areas, but is of strategic importance to the entire country. Canada is heavily reliant on a short list of bilateral trade. Aiming to help reduce this dependency, the Canadian government has made diversifying international trade a priority.

Ranking of top 10 foreign customers of small town and rural Shopify merchants (who reside in Canada) versus all Canadian businesses



Broadening Global Growth

Deep Dive Analysis

Contributing to Economic Growth and Development—India

Region Context

Emerging market economies are an increasing share of the global economy. While the rise of China often gets the international attention, India has been a significant driver of economic activity in recent years. With a growth rate of close to 7% per annum, the country is rapidly rising in share of the world economy.¹ India is expected to remain a top performer in the economic outlook, but it faces a similar challenge to advanced economies in that the growth is concentrated in major cities. Small cities and rural communities are lagging.

Fueling Regional Entrepreneurship

Shopify has enabled merchants in India to generate over \$250.8 million in revenues from 2016 to 2018, including \$63.3 million in exports.

¹ Source: International Monetary Fund

Providing a Platform for Indian Tech Firms

The Shopify partner network has provided India with opportunities to generate economic growth through its science and technology sector.

As of 2018, Shopify's partner network hosted more than 1,600 businesses in India. The apps innovated by many of these firms were used by over 280,000 merchants globally.

Empowering Entrepreneurs Outside of the Major Cities

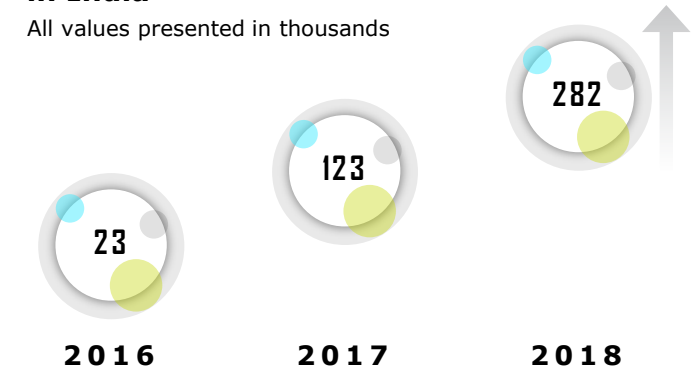
Shopify has enabled merchants in the smaller cities and rural areas of India to reach developed markets, such as the US, UK, and Australia.

Between 2016 and 2018, Shopify entrepreneurs operating in these areas made \$45.9 million in international sales, of which 90.6% was made to developed countries. This is a meaningful level of economic activity in India, where the average income is approximately \$2,000 per year.²

² Source: World Bank Group

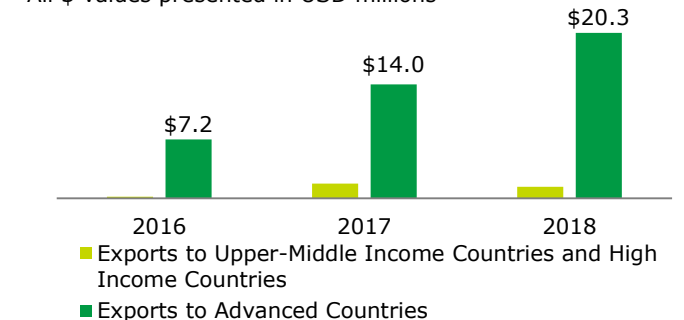
Count of Shopify merchants that have used partner apps that were innovated in India

All values presented in thousands



Exports by Indian Shopify merchants whom reside outside of the country's 10 largest cities

All \$ values presented in USD millions



Broadening Global Growth

Deep Dive Analysis

Contributing to Economic Growth and Development—Sub-Saharan Africa

Region Context

The countries of sub-Saharan Africa face a range of difficult economic challenges, such as poverty, stability and security, and the effects of climate change. Within this context, a priority across the region is to leverage digital technologies to foster entrepreneurship, inclusivity, productivity, and economic growth.

Fueling Regional Entrepreneurship

Shopify has enabled merchants in sub-Saharan Africa to generate over \$214.1 million in revenues from 2016 to 2018, including \$13.0 million in exports. For context, the \$214.1 million in total sales is equal to approximately 8% of monthly tourism revenues earned in the region on average.¹

While these values of sales may appear small relative to other jurisdictions (e.g., US), they are impactful in a region where the average annual income is roughly \$1,500.²

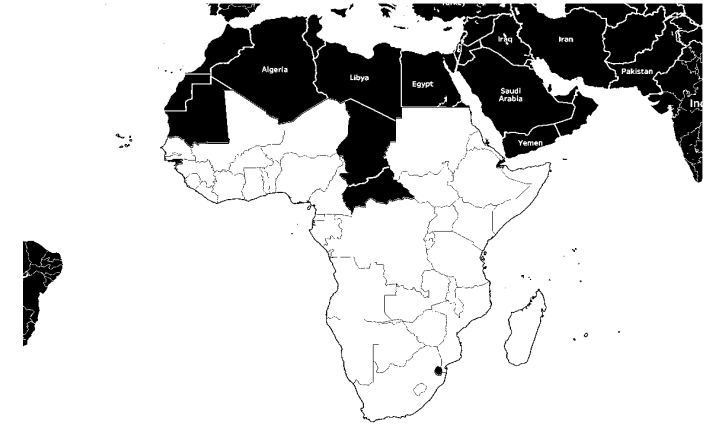
¹ **Note:** Tourism is an important industry in the region, amounting to roughly 9% of all exports (including energy resource exports). **Source:** World Bank Group

² **Source:** World Bank Group

Shopify Supports Merchants Across the Continent

As of 2018, there are nearly 8,500 merchants across 43 countries in sub-Saharan Africa, up from approximately 3,600 merchants in 38 countries in 2016.

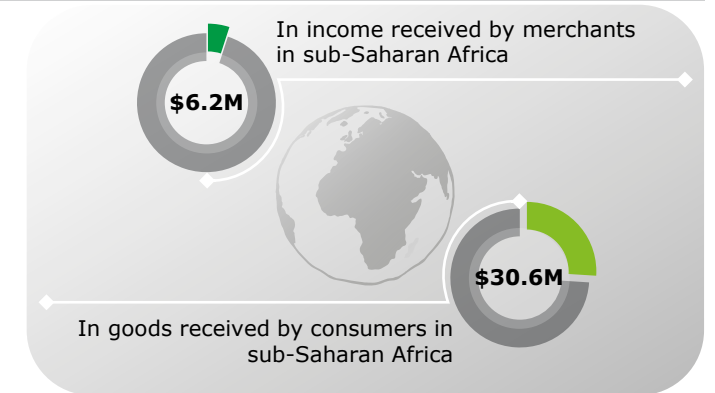
Merchant revenues generated in sub-Saharan Africa, 2018



Shopify Facilitates Trade between Sub-Saharan Africa and Developed Countries

Shopify facilitates trade between sub-Saharan Africa and developed countries, serving to benefit the merchants and consumers:

- Merchants in sub-Saharan Africa have access to consumers in the developed world, who have higher levels of disposable income.
- Consumers in sub-Saharan Africa also benefit, as they have greater access to products from large economies, such as US, Europe, and Australia.



Flow of goods and funds between sub-Saharan Africa and developed countries 2018, all \$ values in USD millions

Strengthening and Diversifying DTC and Ecommerce



Strengthening and Diversifying DTC and Ecommerce

Shopify is a global leader in enabling and innovating the DTC retail model and ecommerce, which leads to economic benefits via merchant and consumer activity.



As a leading multi-channel commerce platform, Shopify strengthens and diversifies direct-to-consumer (DTC) and ecommerce activity on a global scale. Shopify drives key innovative initiatives and its merchants online sales outpace global ecommerce growth—which in turn drives economic opportunities for merchants and consumers.

Generally, DTC and ecommerce benefit merchants through various important channels. These retail models empower niche and experimental brands while also supporting and strengthening larger established brands, allowing these groups access to broader new customer markets on a global scale. Through DTC and ecommerce merchants have access to consumer data that may not have been previously accessible. Using digital platforms, this may manifest as access to valuable customer segmentation data, such as demographics, location, and search history, which can support product enhancements and growth strategies—enhancing the ability for merchants to compete. DTC and ecommerce brands have greater control of their brand positioning, messaging, and customer engagement at every stage of the sales cycle. Equipped with consumer data, businesses have more personalized relationships with their consumers and potentially greater success at conversion. Further, the DTC model provides opportunities to diversify sources of sales and

generate incremental revenue. Brands may also avoid losing margin to a third-party retailer.

It is important to also note that DTC and ecommerce can generate economic benefits to consumers. These benefits include competitive retail prices, convenience, lower search cost requirements, and more product and price transparency. Competitive retail prices can result from an open, more transparent global marketplace. Consumers have greater convenience as products are digitally accessible and available 24/7, which empowers consumers facing geographical, physical, or time constraints and allows greater individual productivity. Ecommerce enhances the ability of consumers to access product information, such as reviews and price comparisons, which can help inform better purchasing decisions. This greater transparency creates incentives for merchants to produce higher quality and more fairly priced products.

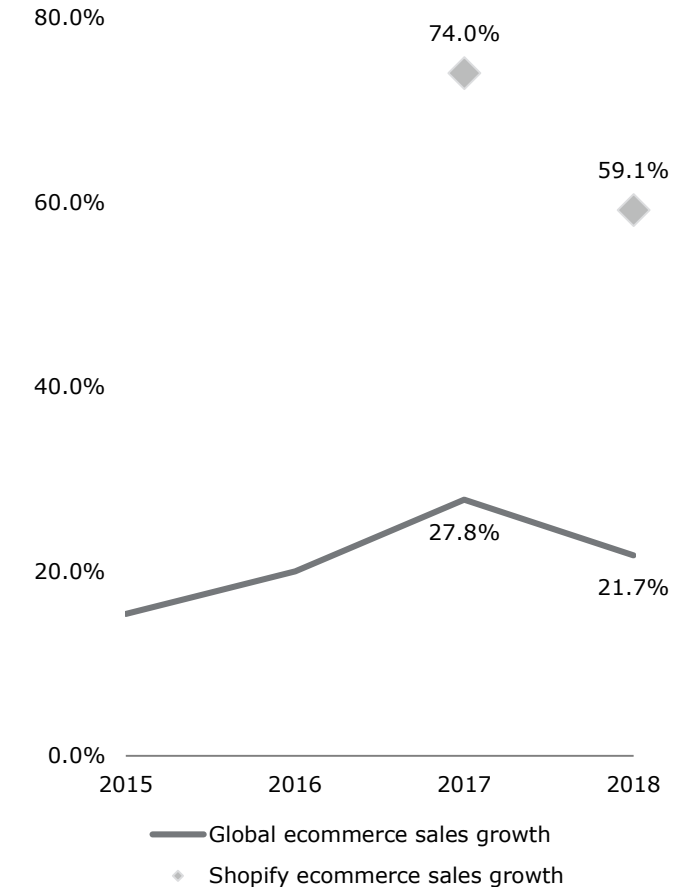
As a result of these merchant and consumer benefits, more entrepreneurs can enter their given market and consumers can optimize their spending and levels of productivity, which collectively fosters greater competitiveness, innovation, and productivity.

Strengthening and Diversifying DTC and Ecommerce

Shopify helps to propel growth in DTC and ecommerce.

Shopify ecommerce merchant sales growth is higher than the growth rate of the entire ecommerce market (Shopify and non-Shopify businesses included). As illustrated to the right, ecommerce growth was 59.1% across Shopify in 2018 versus 21.7% for the entire market. This data suggests that Shopify provides positive momentum to ecommerce and, in turn, the DTC retail model.

Global ecommerce growth versus Shopify merchant ecommerce revenue growth

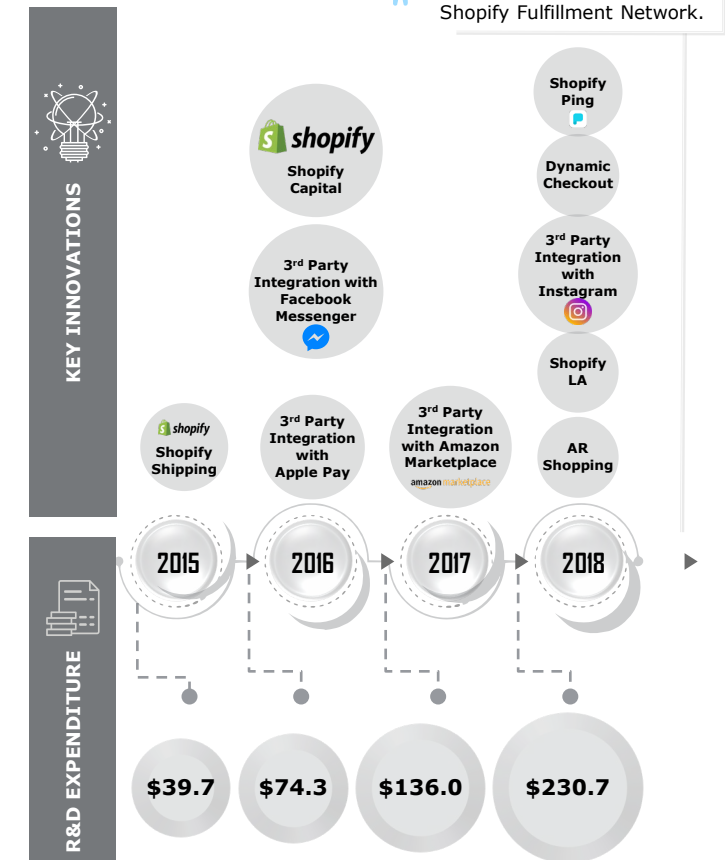


Source: eMarketr, reported by Shopify; Shopify; Deloitte Analysis

Shopify annual research and development (R&D) expenditures and key innovations

2015–2018, all \$ values in USD millions

Moving Forward: Shopify has already released impactful innovations in 2019, such as Shopify Fulfillment Network.



Strengthening and Diversifying DTC and Ecommerce

Ecommerce delivers economic benefits to consumers.

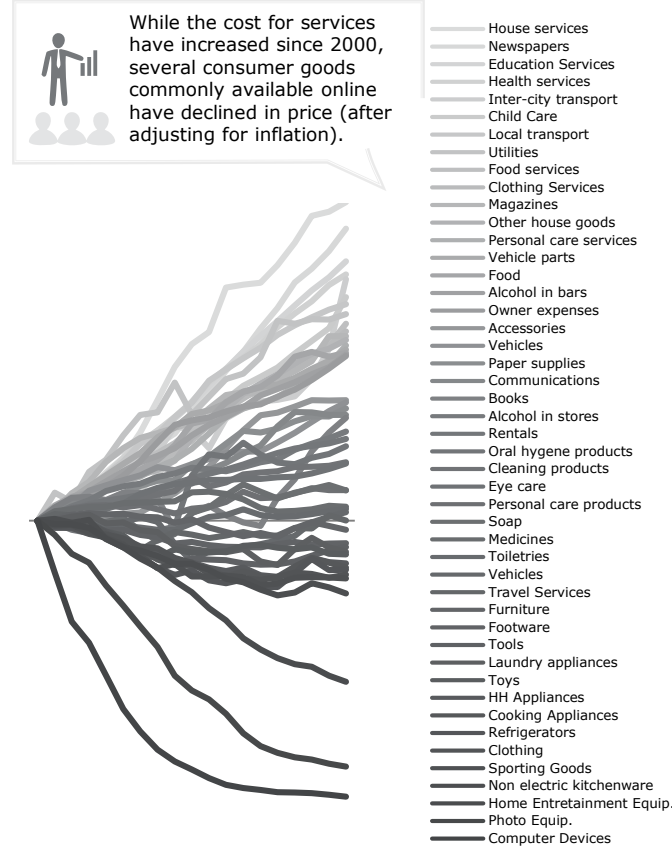
DTC and ecommerce not only provide benefits to merchants. There are also positive economic outcomes achieved by consumers.

Economists commonly argue that ecommerce is among the global trends that have put downward pressure on prices for household goods, as it has increased market competitiveness.

Additionally, household data illustrates that consumers find ecommerce more convenient, with lower search-cost requirements and greater product information and price transparency.

Price indices for household goods and services

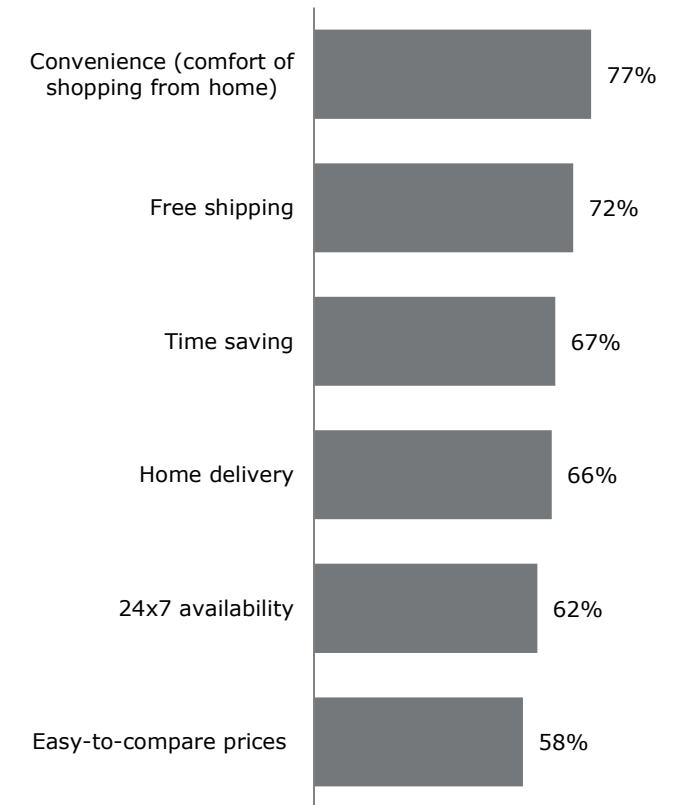
Canadian price data, index 2000 = 100¹



Note: While this data represents Canada, the changes in price depicted are consistent with broader global trends.
Source: Statistics Canada; Deloitte Analysis

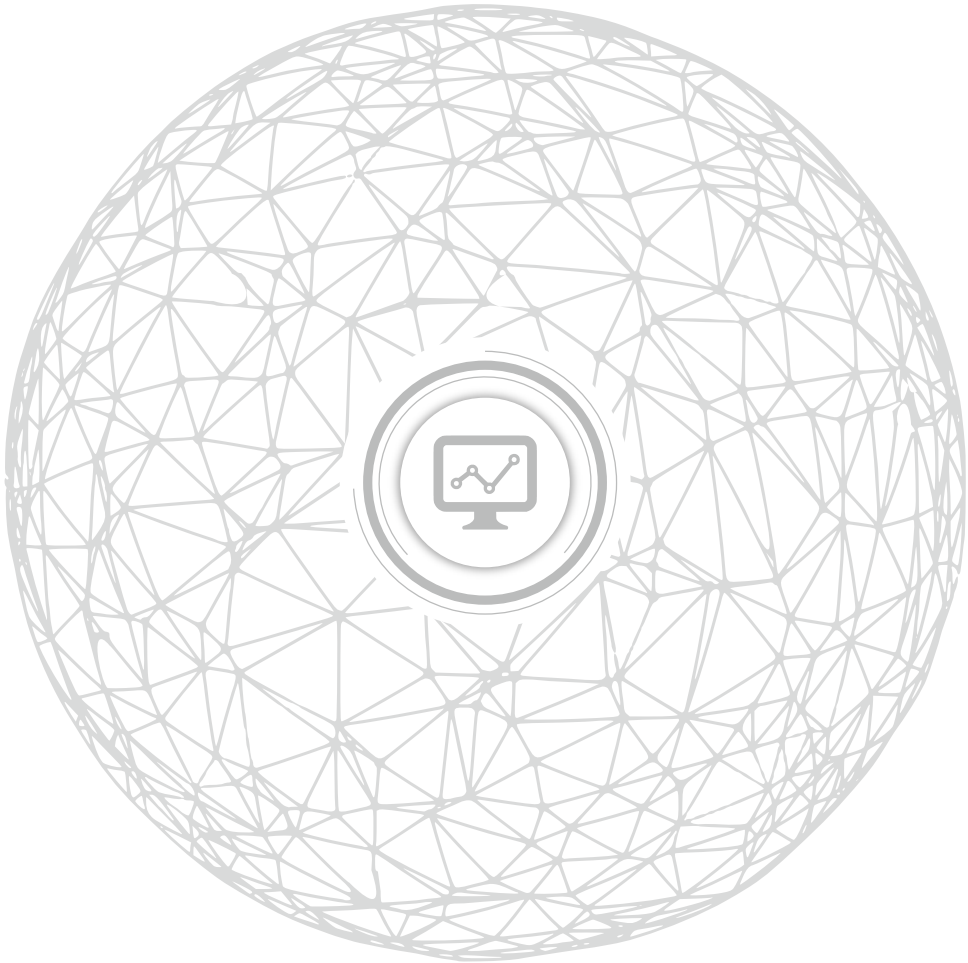
Consumer motivations for engaging in ecommerce

Self reported, 2018



Note: n = 1,441
Source: Deloitte Insights, Deloitte 2018 Holiday Survey

Growing Canada's Technology Sector



Growing Canada's Technology Sector

During this critical period of industry transformation, Shopify contributes to developing Canada's knowledge-based economy.



Canada's economy is evolving. In the beginning, the country was a commodity-based economy. It then became a branch-plant manufacturing economy and, over time, Canada's industry mix shifted toward advanced manufacturing and services.

In recent years Canada's economic growth has become evermore reliant on high-value-added services industries. This evolution is the result of a natural progression in economic development. Yet, it is also driven by the tectonic changes of globalization and technical change: Canada can no longer compete with low labor costs in developing nations or automated manufacturing. Moving forward, economic prosperity will only come through building sophisticated products and delivering advanced services.

Shopify is a part of Canada's economic evolution toward digital, high-value-added services:

- Shopify is a major company within Canada's professional, scientific, and technical services industry. It contributes positive momentum to the sales growth of the entire sector.
- Shopify provides high-value-added job opportunities and helps to develop Canadian talent. Its headcount growth has outpaced the broader professional, scientific, and technical services industry in all the Canadian cities that it operates in.

- Shopify contributes significant R&D expenditure to Canada, which lags behind other advanced economies in this area.

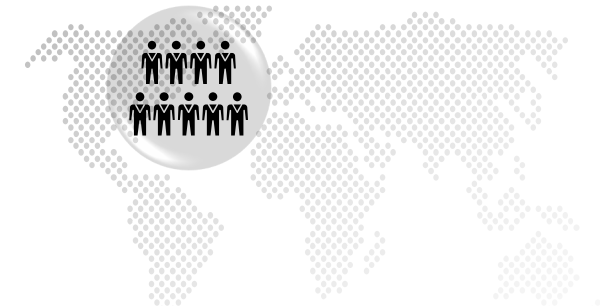
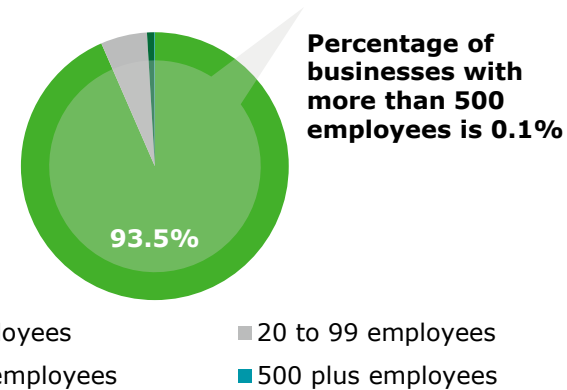
Growing Canada's Technology Sector

Shopify is a leading Canadian technology company.

Shopify's core mission is to empower entrepreneurship, "to make commerce better for everyone." Yet, as a company that provides digital solutions and employs a range of professional occupations—from software design and data processing to marketing and legal—Shopify has emerged as a leading Canadian professional, scientific, and technical services company.

By market capitalization, Shopify is currently the largest company within this industry listed on the Toronto Stock Exchange.¹

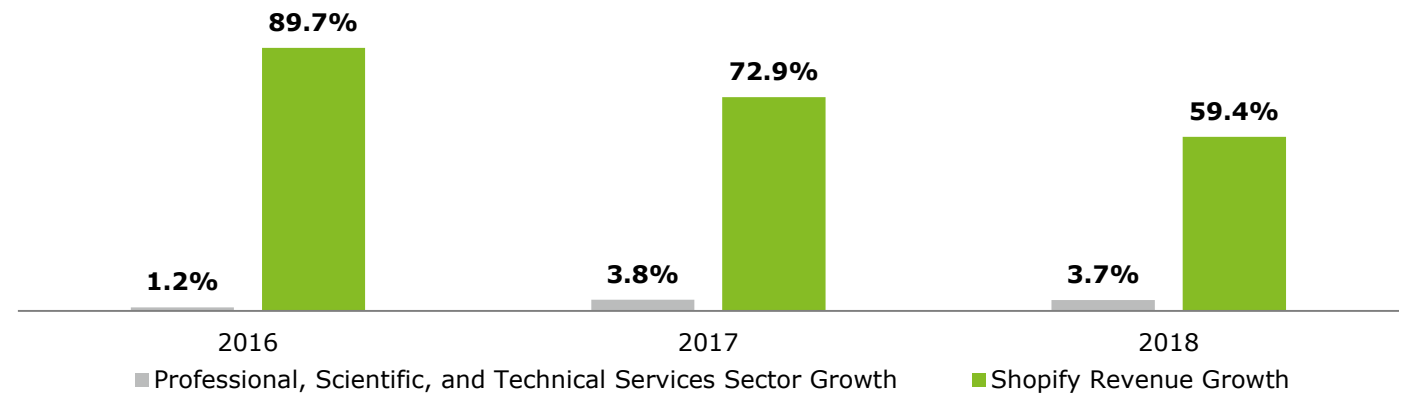
Companies by employment size in Canada's professional, scientific, and technical services sector



With over 4,000 employees globally, including more than 3,100 located in Canada, Shopify ranks among the largest Canadian companies of its type.

Source: Statistics Canada; Deloitte Analysis

Canadian professional, scientific, and technical services sector and Shopify revenue growth



Source: Statistics Canada; Shopify; Deloitte Analysis

¹ Source: Bloomberg LP (as of October 16, 2019)

Growing Canada's Technology Sector

Shopify creates new job opportunities as Canada experiences industry transformation.

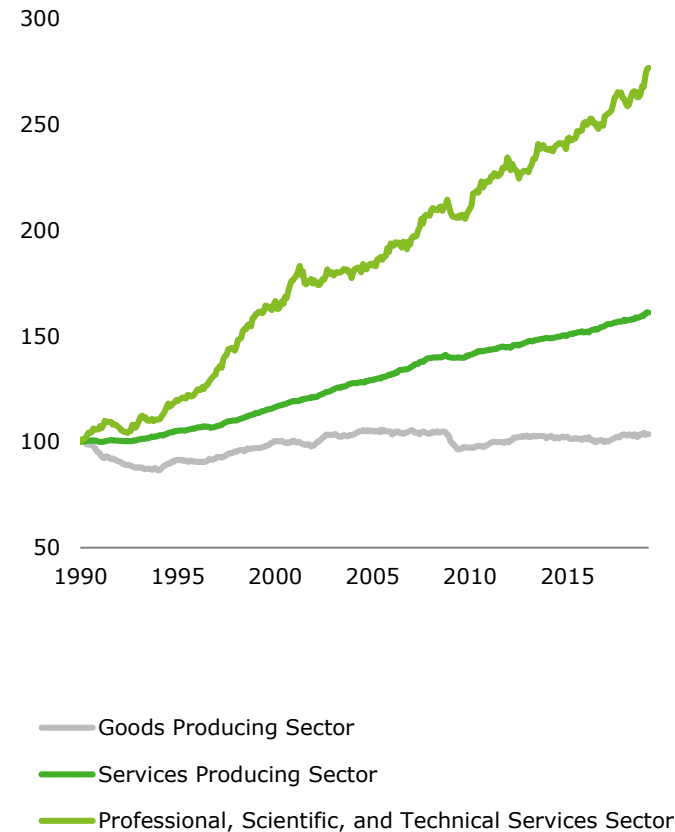
Canada has experienced a period of industry transformation in which its economy has shifted from goods producing sectors to services producing sectors.

Professional, scientific, and technical services growth has been a key driver in this development and, across all Canadian cities in which it is present, Shopify has outgrown this sector in terms of employment.

As Canada's industry makeup becomes more oriented toward professional, scientific, and technical sectors, Shopify is playing a role in providing job opportunities and developing Canadian talent.

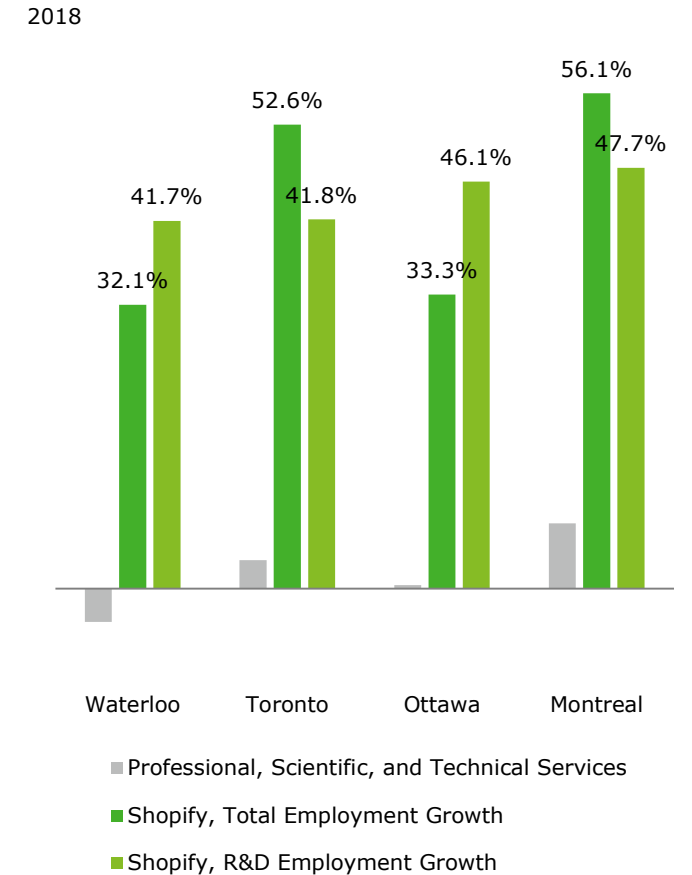
Canadian employment growth by industry group

Index 1990=100



Source: Statistics Canada; Deloitte Analysis

Shopify annual employment growth and total sector growth in Canada 2018



Source: Statistics Canada; Shopify; Deloitte Analysis

Growing Canada's Technology Sector

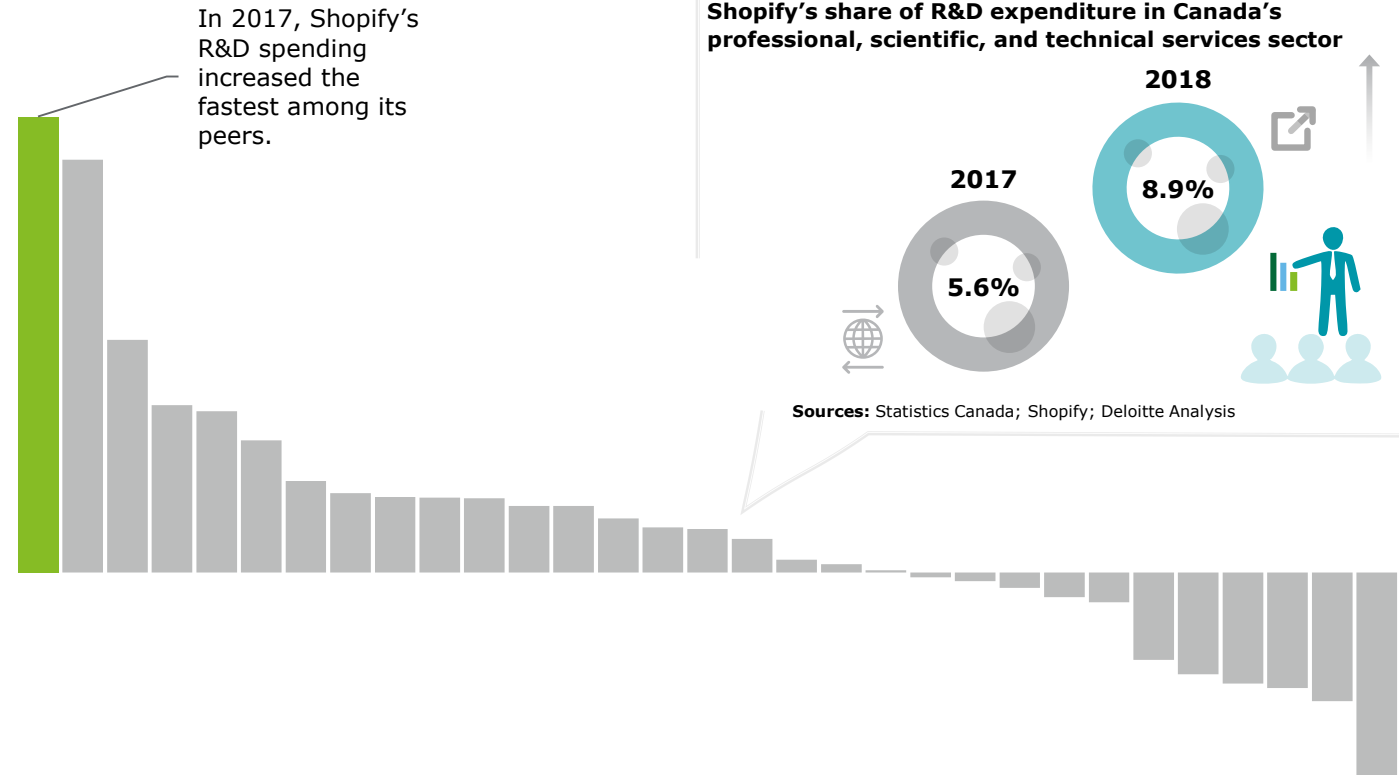
Shopify plays a significant role in driving R&D spending in Canada.

Canada has lagged in R&D spending and productivity investments: it ranks 20th among 36 OECD countries in terms of R&D expenditure as a percentage of GDP.¹

Shopify invested approximately \$230.7 million in R&D expenditures in 2018, up from \$136.0 million in 2017 (70% growth) and \$39.7 million in 2015. While Shopify is ultimately an entrepreneurship company, its R&D investments help to drive new Canadian owned technologies.

Growth rate among Canadian firms with over \$100M USD in annual R&D expenditure

Based on most recent year data, 2017



¹ Source: OECD; Deloitte Analysis

Source: Research Infosource Inc.; Shopify; Deloitte Analysis



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