UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 40-F

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☒ ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2018 **Commission File Number 001-37400**

SHOPIFY INC.

(Exact name of Registrant as specified in its charter)

Canada
(Province or other jurisdiction of incorporation or organization)

7372
(Primary Standard Industrial Classification Code Number (if applicable))

30-0830605
(I.R.S. Employer Identification Number (if applicable))

150 Elgin Street, 8th Floor Ottawa, Ontario, Canada K2P 1L4
Attention: Joseph A. Frasca, SVP, General Counsel and Corporate Secretary
613-241-2828
(Address and telephone number of Registrant's principal executive offices)

Corporation Service Company
251 Little Falls Drive, Wilmington, DE 19808
(302) 636-5400
(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

Copies of all correspondence should be sent to:

Joseph A. Frasca
SVP, General Counsel and Corporate Secretary
Shopify Inc.
150 Elgin Street, 8th Floor
Ottawa, ON K2P 1L4
Canada
Tel: (613) 241-2828

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Name of each exchange on which registered
Class A Subordinate Voting Shares	**New York Stock Exchange**

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

Class B Multiple Voting Shares

(Title of Class)

For annual reports, indicate by check mark the information filed with this Form:

☒ Annual Information Form ☒ Audited annual financial statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

The Registrant had 98,081,889 Class A Subordinate Voting Shares and 12,310,800 Class B Multiple Voting Shares issued and outstanding as of December 31, 2018.

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 12b-2 of the Exchange Act.

Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

☐

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

PRIOR FILINGS MODIFIED AND SUPERSEDED

This annual report on Form 40-F of Shopify Inc. ("Shopify", "we", "our", the "Company" or the "Registrant") for the year ended December 31, 2018, at the time of filing with the U.S. Securities and Exchange Commission (the "SEC" or the "Commission"), modifies and supersedes all prior documents filed pursuant to Sections 13, 14 and 15(d) of the U.S. Securities Exchange Act of 1934 (as amended, the "Exchange Act") for purposes of any offers or sales of any securities after the date of this filing pursuant to any registration statement or prospectus filed pursuant to the U.S. Securities Act of 1933 (as amended, the "Securities Act") which incorporates by reference this annual report on Form 40-F (or any of the documents filed as Exhibits to this annual report on Form 40-F).

FORWARD-LOOKING STATEMENTS

Shopify has made in this annual report on Form 40-F and the documents filed as Exhibits hereto, and from time to time may otherwise make, forward-looking statements under the provisions of the United States Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act, and Section 21E of the Exchange Act, and forward-looking information within the meaning of applicable Canadian securities legislation.

The Company's actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

The forward-looking statements represent the Company's views as of the date of this annual report on Form 40-F. The Company anticipates that subsequent events and developments may cause these views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company has no current intention of doing so except to the extent required by applicable law. Therefore, these forward-looking statements do not represent the Company's views as of any date other than the date of this annual report on Form 40-F.

See Shopify's annual information form for the year ended December 31, 2018, attached as Exhibit 1.1 to this Annual Report on Form 40-F, under the heading "Forward-Looking Information" and Shopify's management’s discussion and analysis for the year ended December 31, 2018, attached as Exhibit 1.3 to this Annual Report on Form 40-F (the "Shopify 2018 MD&A"), under the heading "Forward-looking statements", for a discussion of forward-looking statements.

A. Disclosure Controls and Procedures and Internal Control Over Financial Reporting

All control systems, no matter how well designed, have inherent limitations. Accordingly, even disclosure controls and procedures and internal controls over financial reporting determined to be effective can only provide reasonable assurance of achieving their control objectives with respect to financial statement preparation and presentation.

Disclosure Controls and Procedures

Management of the Company, under the supervision of the Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining disclosure controls and procedures (as defined by the Commission in Rule 13a-15(e) under the Exchange Act) for the Company to ensure that material information relating to the Company, including its consolidated subsidiaries, that is required to be made known to the Chief Executive Officer and Chief Financial Officer by others within the Company and disclosed by the Company in reports filed or submitted by it under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms; and (ii) accumulated and communicated to the Company’s management, including its Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

We, including the Chief Executive Officer and Chief Financial Officer, have evaluated the effectiveness of the Company's disclosure controls and procedures as of December 31, 2018 and have concluded that the Company’s disclosure controls and procedures were effective as of December 31, 2018. See “Disclosure Controls and Procedures and Internal Control Over Financial Reporting” in the Shopify 2018 MD&A, filed as Exhibit No. 1.3 to this Annual Report on Form 40-F.

Management's Annual Report on Internal Control over Financial Reporting

Management of the Company, under the supervision of the Chief Executive Officer and the Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over the Company’s financial reporting. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with United States generally accepted accounting principles.

We, including the Chief Executive Officer and Chief Financial Officer, have assessed the effectiveness of the Company’s internal control over financial reporting in accordance with Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment, we, including the Chief Executive Officer and Chief Financial Officer, have determined that the Company’s internal control over financial reporting was effective as at December 31, 2018. Additionally, based on our assessment, we determined that there were no material weaknesses in the Company's internal control over financial reporting as at December 31, 2018. See “Management's Annual Report on Internal Control Over Financial Reporting”, which accompanies Shopify's audited consolidated financial statements as at December 31, 2018 and 2017 and for the years then ended (the "Shopify 2018 Financial Statements"), filed as Exhibit 1.2 to this Annual Report on Form 40-F.

Auditors' Report on Internal Control over Financial Reporting

The effectiveness of the Company's internal control over financial reporting as at December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which accompanies Shopify 2018 Financial Statements, and is incorporated herein by reference.

Changes in Internal Control over Financial Reporting

During the year ended December 31, 2018 , there were no significant changes in the Company’s internal control over financial reporting, or any other factors that could significantly affect such internal control, that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

B. Identification of the Audit Committee

The board of directors of the Company (the "Board") has a separately designated standing audit committee (the "Audit Committee") established in accordance with section 3(a)(58)(A) of the Exchange Act. The Board has appointed four independent directors, Steven Collins (Chair), Robert Ashe, Gail Goodman and Colleen Johnston, to the Audit Committee.

C. Audit Committee Financial Expert

The Board has determined that Steven Collins, the Chair of the Audit Committee, is qualified as an "audit committee financial expert" within the meaning of Item 407 of Regulation S-K. The Board has further determined that all members of the Audit Committee are "independent" within the meaning of applicable Commission regulations and the listing standards of the New York Stock Exchange (the "NYSE").

The Commission has indicated that the designation of a person as an audit committee financial expert does not make such person an "expert" for any purpose, or impose any duties, obligations or liability on such person that are greater than those imposed on members of the Audit Committee and the Board who do not carry this designation, or affect the duties, obligations or liability of any other member of the Audit Committee or Board.

D. Code of Ethics

The Company’s code of ethics, the Shopify Code of Conduct, is applicable to all of its directors, officers and employees, including the Chief Executive Officer, Chief Financial Officer, Controller, and persons performing similar functions. The Shopify Code of Conduct is available on the Company’s website at https://investors.shopify.com/governance/governance-documents/default.aspx. Except for the Shopify Code of Conduct, and notwithstanding any reference to Shopify's website or other websites in this annual report on Form 40-F or in the documents incorporated by reference herein or attached as Exhibits hereto, no information contained on the Company's website or any other site shall be incorporated by reference in this annual report on Form 40-F or in the documents incorporated by reference herein or attached as Exhibits hereto.

E. Principal Accountant Fees and Services

The aggregate amounts paid or accrued by the Company with respect to fees payable to PricewaterhouseCoopers LLP, the auditors of the Company, for audit (including separate audits of wholly-owned and non-wholly owned entities, financings, regulatory reporting requirements and SOX related services), audit-related, tax and other services in the years ended December 31, 2018 and 2017 were as follows:

	Fiscal 2018 US$	Fiscal 2017 US$
	(in thousands)	
Audit Fees	764	600
Audit-related Fees	—	—
Tax Fees	—	—
All Other Fees	2	2
Total	**766**	**602**

Audit Fees

Audit fees relate to the audit of our annual consolidated financial statements, the review of our quarterly condensed consolidated financial statements and services in connection with our registration statement on Form F-10 (related to our 2018 public offerings of Class A subordinate voting shares).

Audit-Related Fees

Audit-related fees consist of aggregate fees for accounting consultations and other services that were reasonably related to the performance of audits or reviews of our consolidated financial statements and were not reported above under "Audit Fees."

Tax Fees

Tax fees relate to assistance with tax compliance, expatriate tax return preparation, tax planning and various tax advisory services.

All Other Fees

Other fees are any additional amounts for products and services provided by the principal accountants, other than the services reported above under "Audit Fees,", "Audit-Related Fees" and "Tax Fees".

Audit Committee Pre-Approval Policies and Procedures

From time to time, management recommends to and requests approval from the Audit Committee for audit and non-audit services to be provided by the Company's auditors. The Audit Committee considers such requests, if applicable, on a quarterly basis, and if acceptable, pre-approves such audit and non-audit services. During such deliberations, the Audit Committee assesses, among other factors, whether the services requested would be considered "prohibited services" as contemplated by the SEC, and whether the services requested and the fees related to such services could impair the independence of the Company's auditors.

The Audit Committee considered and agreed that the fees paid to the Company's auditors in the years ended December 31, 2018 and 2017 are compatible with maintaining the independence of the Company's auditors. The Audit Committee determined that, in order to ensure the continued independence of the auditors, only limited non-audit services will be provided to the Company by our auditors, PricewaterhouseCoopers LLP.

Since the implementation of the Audit Committee pre-approval process in November 2015, all audit and non-audit services rendered by our auditors have been pre-approved by the Audit Committee.

F. Off-Balance Sheet Arrangements

We have no material off-balance sheet arrangements, other than operating leases (which have been disclosed under "Contractual Obligations and Contingencies" in the Shopify 2018 MD&A).

G. Tabular Disclosure of Contractual Obligations

See Shopify 2018 MD&A, under the heading "Contractual Obligations and Contingencies", which section is incorporated by reference in this annual report on Form 40-F, for a tabular disclosure and discussion of contractual obligations.

H. NYSE Exemptions

Section 310.00 of the NYSE Listed Company Manual generally requires that a listed company's by-laws provide for a quorum for any meeting of the holders of the company's common shares that is sufficiently high to ensure a representative vote. Pursuant to the NYSE corporate governance rules we, as a foreign private issuer, have elected to comply with practices that are permitted under Canadian law in lieu of the provisions of Section 310.00. Our by-laws provide that the holders of at least 25% of the shares entitled to vote at the meeting, present in person or represented by proxy, and at least two persons entitled to vote at the meeting, present in person or represented by proxy, constitutes a quorum.

Except as stated above, we are in compliance with the rules generally applicable to U.S. domestic companies listed on the NYSE. We may in the future decide to use other foreign private issuer exemptions with respect to some of the other NYSE listing requirements. Following our home country governance practices, as opposed to the requirements that would otherwise apply to a company listed on the NYSE, may provide less protection than is accorded to investors under the NYSE listing requirements applicable to U.S. domestic issuers.

I. Undertaking

Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

EXHIBITS

The following documents are filed as exhibits to this annual report on Form 40-F:

Exhibit No.	Document
1.1	Annual Information Form for the year ended December 31, 2018
1.2	Audited Consolidated Financial Statements for the year ended December 31, 2018
1.3	Management’s Discussion and Analysis for the year ended December 31, 2018
23.1	Consent of PricewaterhouseCoopers LLP
31.1	Certification of the Chief Executive Officer and the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of the Chief Executive Officer and the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Exhibits 1.1, 1.2 and 1.3 of this Report on Form 6-K are incorporated by reference into the Registration Statement on Form F-10 of the Registrant, which was originally filed with the Securities and Exchange Commission on July 30, 2018 (File No. 333-226444), the Registration Statement on Form S-8 of the Registrant, which was originally filed with the Securities and Exchange Commission on May 29, 2015 (File No. 333-204568) and the Registration Statement on Form S-8 of the Registrant, which was originally filed with the Securities and Exchange Commission on May 12, 2016 (File No. 333-211305) (together, the "Registration Statements"). Exhibit 23.1 is incorporated by reference as an exhibit to the Registration Statements.

SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

			Shopify Inc.
			(Registrant)
Date:	February 12, 2019	By:	/s/ *Joseph A. Frasca*
			Name: Joseph A. Frasca Title: SVP, General Counsel and Secretary

EXHIBIT INDEX

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EXHIBIT 1.1

SHOPIFY INC.
2018 ANNUAL INFORMATION FORM

February 12, 2019

ANNUAL INFORMATION FORM
SHOPIFY INC.
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ANNUAL INFORMATION FORM
SHOPIFY INC.

GENERAL MATTERS

Information Contained in this Annual Information Form

In this Annual Information Form ("AIF") "we", "our", "Shopify", and the "Company" refer to Shopify Inc. and its consolidated subsidiaries, unless the context requires otherwise. References to our "solutions" means the combination of products and services that we offer to merchants, and references to "our merchants" as of a particular date means the total number of unique shops that are paying for a subscription to our platform. Words importing the singular, where the context requires, include the plural and vice versa and words importing any gender include all genders.

Unless otherwise indicated, all information in this AIF is presented as at February 7, 2019, and references to specific years are references to the fiscal years of Shopify ended December 31.

This AIF should be read in conjunction with the Company's 2018 audited consolidated financial statements and notes ("2018 Financial Statements") and the Company's 2018 Management's Discussion and Analysis ("2018 MD&A"), but which, for greater certainty, are not incorporated by reference herein.

Shopify and the associated logo are registered trademarks of Shopify Inc. or its subsidiaries. All other marks used herein are trademarks or registered trademarks belonging to their respective owners.

Presentation of Financial Information

We prepare and report our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Our reporting currency is U.S. dollars, and we express all amounts in this AIF in U.S. dollars, except where otherwise indicated. All references in this AIF to "dollars", "$" and "US$" refer to United States dollars, and all references to "CAD$" refer to Canadian dollars, unless otherwise expressly stated. On February 7, 2019, the Bank of Canada rate of exchange for the conversion of U.S. dollars into Canadian dollars was $1.00 = CAD$1.3285.

FORWARD-LOOKING INFORMATION

This AIF contains forward-looking statements under the provisions of the United States Private Securities Litigation Reform Act of 1995, Section 27A of the U.S. Securities Act of 1933 (as amended, the "Securities Act"), and Section 21E of the U.S. Securities Exchange Act of 1934 (as amended, the "Exchange Act"), and forward-looking information within the meaning of applicable Canadian securities legislation.

In some cases, you can identify forward-looking statements by terminology such as "may", "might", "will", "should", "could", "expects", "intends", "plans", "anticipates", "believes", "estimates", "predicts", "projects", "potential", "continue", or the negative of these terms or other similar words. In addition, any statements or information that refer to expectations, beliefs, plans, projections, objectives, performance or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking. In particular, forward-looking statements in this AIF include, but are not limited to, statements about:

- our ability to predict future commerce trends and technology;
- the size of our addressable markets and our ability to serve those markets;
- our exploration of new ways to accelerate checkout;
- our ability to make it easier for merchants to manage their storefronts via their mobile devices;
- whether a merchant using Shopify will ever need to re-platform;
- our ability to expand our merchant base;
- our ability to offer more sales channels that can connect to our platform;
- our ability to develop new solutions to extend the functionality of our platform and catalyze merchants' sales growth;
- our ability to enhance our ecosystem and partner programs;
- our ability to provide a high level of merchant service and support;
- our ability to hire, retain and motivate qualified personnel;
- the intended growth of our business and making investments to drive future growth, and the impact of those investments;
- our expectation that seasonality will continue to affect our quarterly results;
- our expectation that our business may become more seasonal in the future;
- the rapid evolution of multi-channel commerce and ecommerce and our ability to bring to market new and better selling and buying experiences;
- our focus on product management, product development and product design;
- our investment in developing online and point of sale assets with a single commerce operating system;
- our ability to grow our base of merchants by inspiring entrepreneurship through marketing programs;
- the growth of our merchants’ revenues and our ability to retain merchants as they grow;
- our expectation that we will continue to invest in data analytics;
- our intention to continue strategically investing in marketing programs that enhance the awareness of our brand;
- our belief in the importance of establishing relationships with merchants early in the business lifecycle;
- our investment in additional sales capacity focused on larger merchants;
- innovations in, improvements of and expansion of the capabilities of our platform, including the development of new solutions;
- the growth and strengthening of our third-party ecosystem and partner program, including formation of strategic partnerships;
- our ability to continue to build for the long-term;
- our plans to localize the Shopify platform for markets outside our core geographies, promote the Shopify brand, and expand shipping services;
- our intention to optimize our cloud-based infrastructure;
- our expectation that leveraging third-party providers of infrastructure will increase engineering velocity and better position us for potential changes in data sovereignty regulations;
- our expectation of increased competition;
- the expansion of our platform internationally;
- potential selective acquisitions and investments;
- expansion of our lease commitments;
- our plan to increase our investments in research and development and maintain our high level of merchant service and support;
- our plan to continue investing in our network infrastructure;

- our intention to issue stock options or other equity awards as key components of our overall compensation and employee attraction and retention efforts;
- our intention to pursue additional relationships with other third parties, such as technology and content providers and implementation consultants;
- our expectation that we will incur additional general and administrative expenses as a result of our growth;
- our intention to continue our use and development of open source software;
- our investment in efforts to market our brand;
- our exploration of other products, models and structures for Shopify Capital;
- our transfer pricing procedures;
- changes in our pricing models;
- our expectation that we will not pay any cash dividends in the foreseeable future; and
- our intention to invest our future earnings, if any, to fund our growth.

The forward-looking statements contained in this AIF are based on our management's perception of historic trends, current conditions and expected future developments, as well as other assumptions that management believes are appropriate in the circumstances, which include, but are not limited to:

- our ability to increase the functionality of our platform;
- our ability to offer more sales channels that can connect to the platform;
- our belief in the increasing importance of a multi-channel platform that is both fully integrated and easy to use ;
- our belief that commerce transacted over mobile will continue to grow more rapidly than desktop transactions;
- our ability to expand our merchant base, retain revenue from existing merchants as they grow their businesses, and increase sales to both new and existing merchants;
- our ability to manage our growth effectively;
- our ability to protect our intellectual property rights;
- our belief that our merchant solutions make it easier for merchants to start a business and grow on our platform;
- our ability to develop new solutions to extend the functionality of our platform, provide a high level of merchant service and support;
- our ability to hire, retain and motivate qualified personnel;
- our ability to enhance our ecosystem and partner programs, and the assumption that this will drive growth in our merchant base, further accelerating growth of the ecosystem;
- our belief that our investments and acquisitions will increase our revenue base, improve the retention of this base and strengthen our ability to increase sales to our merchants and help drive our growth;
- our ability to achieve our revenue growth objectives while controlling costs and expenses, and our ability to achieve or maintain profitability;
- our belief that monthly recurring revenue ("MRR") is most closely correlated with the long-term value of our merchant relationships;
- our assumptions regarding the principal competitive factors in our markets;
- our ability to predict future commerce trends and technology;
- our assumptions that higher-margin solutions such as Shopify Capital and Shopify Shipping will continue to grow through increased adoption and international expansion;
- our expectation that Shopify Payments will continue to expand internationally;

- our belief that our investments in sales and marketing initiatives will continue to be effective in growing the number of merchants using our platform, in retaining revenue from existing merchants and increasing revenues from both;
- our ability to develop processes, systems and controls to enable our internal support functions to scale with the growth of our business;
- our ability to obtain sufficient space for our growing employee base;
- our ability to retain key personnel;
- our ability to protect against currency, interest rate, concentration of credit and inflation risks;
- our assumptions as to our future expenses and financing requirements;
- our assumptions as to our critical accounting policies and estimates; and
- our assumptions as to the effects of accounting pronouncements to be adopted.

Factors that may cause actual results to differ materially from current expectations may include, but are not limited to, risks and uncertainties that are discussed in greater detail in the "Risk Factors" section of this AIF, including but not limited to risks relating to:

- sustaining our rapid growth;
- managing our growth;
- our history of losses and our potential inability to achieve profitability;
- our limited operating history in new and developing markets and new geographic regions;
- our ability to innovate;
- a denial of service attack or security breach;
- payments processed through Shopify Payments;
- our reliance on a single supplier to provide the technology we offer through Shopify Payments;
- the security of personal information we store relating to merchants and their buyers, as well as buyers with whom we have a direct relationship;
- evolving privacy laws and regulations, cross-border data transfer restrictions, data localization requirements and other domestic or foreign regulations may limit the use and adoption of our services;
- our potential inability to hire, retain and motivate qualified personnel;
- international sales and the use of our platform in various countries;
- our potential inability to compete successfully against current and future competitors;
- serious software errors or defects;
- exchange rate fluctuations that may negatively affect our results of operations;
- our potential inability to achieve or maintain data transmission capacity;
- the reliance of our growth in part on the success of our strategic relationships with third parties;
- our potential failure to maintain a consistently high level of customer service;
- our use of a limited number of data centers and a cloud-based platform to deliver our services;
- ineffective operations of our solutions when accessed through mobile devices;
- changes to technologies used in our platform or new versions or upgrades of operating systems and internet browsers;
- the impact of worldwide economic conditions, including the resulting effect on spending by small and medium-sized businesses ("SMBs") or their buyers;
- potential claims by third parties of intellectual property infringement;
- our potential inability to obtain, maintain and protect our intellectual property rights and proprietary information or prevent third parties from making unauthorized use of our technology;
- our use of open source software;
- our potential inability to generate traffic to our website through search engines and social networking sites;

- our potential failure to effectively maintain, promote and enhance our brand;
- our dependence on the continued services and performance of our senior management and other key employees;
- activities of merchants or partners or the content of merchants' shops;
- acquisitions and investments;
- seasonal fluctuations;
- our reliance on computer hardware, purchased or leased, software licensed from and services rendered by third parties, in order to provide our solutions and run our business, sometimes by a single-source supplier;
- Shopify Capital and offering financing;
- our pricing decisions for our solutions;
- provisions of our financial instruments;
- our potential inability to raise additional funds as may be needed to pursue our growth strategy or continue our operations, on favorable terms or at all;
- unanticipated changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns;
- new tax laws could be enacted or existing laws could be applied to us or our merchants;
- being required to collect federal, state and local business taxes and sales and use taxes in additional jurisdictions or for past sales;
- our tax loss carryforwards;
- our dependence upon buyers' and merchants' access to, and willingness to use, the internet for commerce;
- ownership of our shares;
- our sensitivity to interest rate fluctuations;
- our concentration of credit risk, and the ability to mitigate that risk using third parties; and
- the risk of inflation.

Although we believe that the plans, intentions, expectations, assumptions and strategies reflected in our forward-looking statements are reasonable, these statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors which are, in some cases, beyond our control. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future results. You should read this AIF and the documents that we reference in this AIF completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

The forward-looking statements in this AIF represent our views as of the date of this AIF. We anticipate that subsequent events and developments may cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. Therefore, these forward-looking statements do not represent our views as of any date other than the date of this AIF.

CORPORATE STRUCTURE

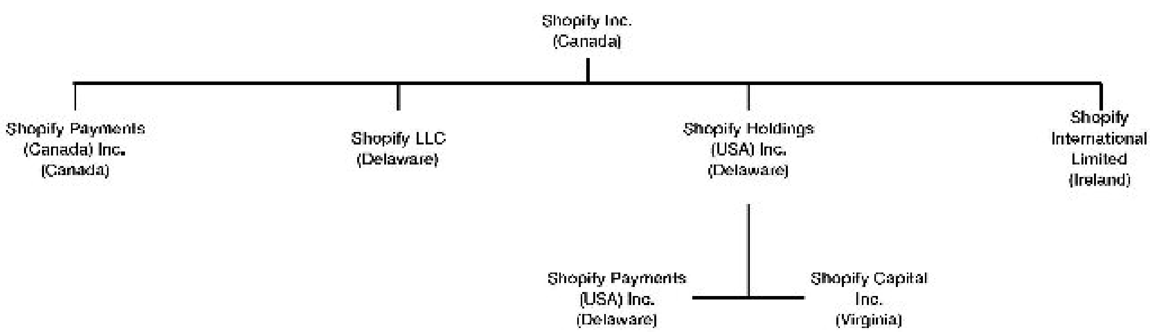
Name, Address and Incorporation

The Company was incorporated under the *Canada Business Corporations Act* (the "CBCA") on September 28, 2004 under the name 4261607 Canada Ltd. We filed articles of amendment on January 19, 2006 to change our name to Jaded Pixel Technologies Inc., and again on November 30, 2011 to change our name to Shopify Inc. On April 12, 2013, we filed articles of amendment to split all of our issued and outstanding common shares and all of our issued and outstanding Series A and Series B preferred shares on a 5-for-1 basis. On May 22, 2015, we filed articles of amendment to amend and re-designate our authorized and issued share capital in connection with our initial public offering. See "Capital Structure" for more information about our current share capital. On May 27, 2015, we restated our amended articles of incorporation.

Our head and registered office is located at 150 Elgin Street, 8th floor, Ottawa, Ontario, Canada K2P 1L4, and our telephone number is (613) 241-2828. Our website address is www.shopify.com. Information contained on, or accessible through, our website is not a part of this AIF.

Intercorporate Relationships

The following chart shows our current material subsidiaries. All of our subsidiaries are wholly owned.



DESCRIPTION OF THE BUSINESS

Overview

Shopify is the leading cloud-based, multi-channel commerce platform. Shopify builds web- and mobile-based software and lets merchants easily set up beautiful online storefronts that are rich with retail functionality. Merchants use our software to run their business across all of their sales channels, including web and mobile storefronts, physical retail locations, social media storefronts, and marketplaces. The Shopify platform provides merchants with a single view of their business and customers across all of their sales channels and enables them to manage products and inventory, process orders and payments, ship orders, build customer relationships, source products, leverage analytics and reporting, and access financing, all from one integrated back office.

In an era where social media, cloud computing, mobile devices, and data analytics are creating new possibilities for commerce, Shopify provides differentiated value by offering merchants:

A multi-channel front end . Our software enables merchants to easily display, manage, and sell their products across over a dozen different sales channels, including web and mobile storefronts, physical retail locations, pop-up shops, social media storefronts, native mobile apps, buy buttons, and marketplaces. The Shopify API has been developed to support custom storefronts that let merchants sell anywhere, in any language.

A single integrated back end . Our software provides one single integrated, easy-to-use back end that merchants use to manage their business and buyers across these multiple sales channels. Merchants use their Shopify dashboard to manage products and inventory, process orders and payments, ship orders, build customer relationships, source products, leverage analytics and reporting, and access financing.

A data advantage . Our software is delivered to merchants as a service, and operates on a shared infrastructure. With each new transaction processed, we grow our data proficiency. This cloud-based infrastructure not only relieves merchants from running and securing their own hardware, it also consolidates data generated by the interactions between buyers and merchants' shops, as well as those of our merchants on the Shopify platform, providing rich data to inform both our own decisions as well as those of our merchants.

Shopify also enables merchants to build their own brand, leverage mobile technology, and handle massive traffic spikes with flexible infrastructure.

Brand ownership . Shopify is designed to help our merchants own their brand, develop a direct relationship with their buyers, and make their buyer experience memorable and distinctive. We recognize that in a world where buyers have more choices than ever before, a merchant's brand is increasingly important. The Shopify platform is designed to allow a merchant to keep their brand present in every interaction to help build buyer loyalty and competitive advantage against traditional retailers. While our platform is designed to empower merchants first, merchants benefit when buyers are confident that their payments are secure. We believe that an increasing awareness among buyers that Shopify provides a superior and secure checkout experience is an additional advantage for our merchants in an increasingly competitive market. For merchants using Shopify Payments, buyers are already getting a superior experience, and with our investments in additional customer touchpoints such as retail and shipping, brands that sell on Shopify can offer buyers an end-to-end, managed shopping experience that previously was only available to much larger businesses.

Mobile . As ecommerce expands as a percentage of overall retail transactions, today's buyers expect to be able to transact anywhere, anytime, on any device through an experience that is simple, seamless, and secure. As transactions over mobile devices represent the majority of transactions across online stores powered by Shopify, the mobile experience is a merchant's primary and most important interaction with online buyers. For several years Shopify has focused on enabling mobile commerce, and the Shopify platform now includes a mobile-optimized checkout system, designed to enable merchants' buyers to more easily buy products over mobile websites. Our merchants are able to offer their buyers the ability to quickly and securely check out by using Shopify Pay, Apple Pay, and Google Pay on the web, and we continue to explore other new ways to accelerate checkout. Shopify's mobile capabilities are not limited to the front end: merchants who are often on-the-go find themselves managing their storefronts via their mobile devices, as Shopify continues to strive to make it ever easier to do so.

Infrastructure . We build our platform to address the growing challenges facing merchants with the aim of making complex tasks simple. The Shopify platform is engineered to enterprise-level standards and functionality while being designed for simplicity and ease of use. We also design our platform with a robust technical infrastructure able to manage large spikes in traffic that accompany events such as new product releases, holiday shopping seasons, and flash sales. We are constantly innovating and enhancing our platform, with our continuously deployed, multi-tenant architecture ensuring all of our merchants are always using the latest technology.

This combination of ease of use with enterprise-level functionality allows merchants to start with a Shopify store and grow with our platform to almost any size. Using Shopify, merchants may never need to re-platform. Our Shopify Plus subscription plan was created to accommodate larger merchants, with additional functionality, scalability and support requirements. Shopify Plus is also designed for larger merchants not already on Shopify who want to migrate from their expensive and complex legacy solutions and get more functionality.

We believe that our future success is dependent on many factors, including our ability to expand our merchant base, retain merchants as they grow their businesses on our platform, offer more sales channels that connect merchants with their specific target audience, develop new solutions to extend our platform’s functionality and catalyze merchants’ sales growth, enhance our ecosystem and partner programs, provide a high level of merchant support, hire, retain and motivate qualified personnel, and build with a focus on maximizing long-term value.

Our Merchants

Our mission is to make commerce better for everyone, and we believe we can help merchants of nearly all sizes, from aspirational entrepreneurs to large enterprises, and all retail verticals realize their potential at all stages of their business life cycle. While our platform can scale to meet the needs of large merchants, we focus on selling to small and medium-sized businesses (“SMBs”) and entrepreneurs. The large majority of our merchants are on subscription plans that cost less than $50 per month, which is in line with our focus of providing cost-effective solutions for early stage businesses.

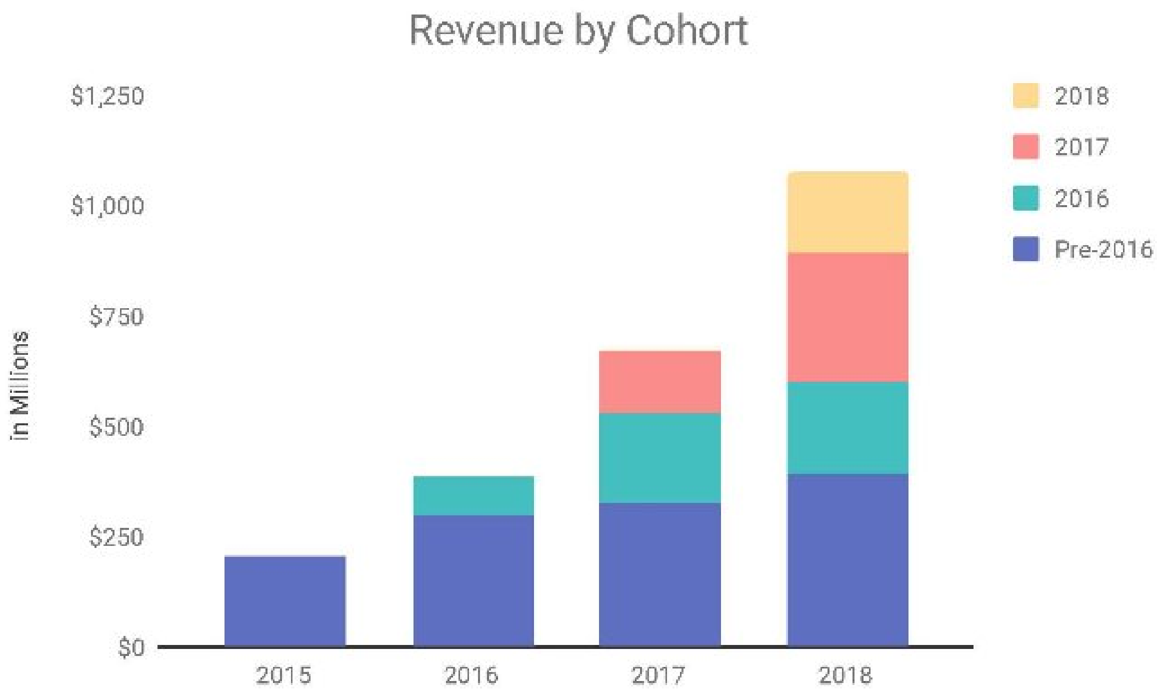
As of December 31, 2018, we had over 820,000 merchants from approximately 175 countries using our platform, geographically dispersed as follows: United States of America, 55%; United Kingdom, 8%; Canada, 7%; Australia, 7%; and 24% in the rest of the world.

Our merchants represent a wide array of retail verticals and business sizes and no single merchant has ever represented more than five percent of our total revenues in a single reporting period.

When our merchants grow their sales and become more successful, they consume more of our merchant solutions, upgrade to higher subscription plans, and purchase additional apps. We believe this to be one of the most powerful drivers of our business model. The chart below displays the annual revenue for merchant cohorts that joined the Shopify platform at different times in our history. The strength of our business model lies in the consistent revenue growth coming from each cohort: the increase in revenue from remaining merchants growing within a cohort offsets the decline in revenue from merchants leaving the platform.

For example, revenue from our pre-2016 cohort grew marginally in 2017 compared to 2016, as the revenue impact from merchants within the cohort leaving the platform was offset by revenue growth from remaining merchants within that cohort. In 2018, revenue from the pre-2016 cohort accelerated its growth over 2017 as merchant retention improved, and the remaining merchants increased their GMV and adopted additional solutions provided through the Shopify platform.

Moreover, the total combined revenue of all previous cohorts once they have annualized and become comparable to prior years has also grown consistently.



Merchant Acquisition

Our merchant acquisition strategy is primarily focused on marketing that builds awareness of our offerings. Our approach includes a strong emphasis on the use of data and analytics while continuously innovating and testing new ideas to drive growth.

Because our merchant base includes a wide array of retail verticals and business sizes, spanning from aspirational startups to long-established enterprises, we use a broad variety of means to attract new merchants. We actively grow our audience through online channels, including organic search, paid search and social media. Our offline channel strategy includes participating in trade shows and local events to generate awareness of our platform. We also invest in content marketing, authoring various Shopify blogs, podcasts, video content through Shopify Studios, eBooks and other free tools, and provide thought leadership to help our merchants succeed and to build their own brand. We employ outbound sales representatives to help drive adoption of our Shopify Plus offering.

In addition to direct channels, we leverage relationships with third-party design agencies, developers, influencers, and freelancers around the world who actively refer merchants to us.

Partner Ecosystem

A rich ecosystem of app developers, theme designers and other partners, such as digital and service professionals, marketers, photographers, and affiliates has evolved around the Shopify platform. Approximately 18,000 of these partners have referred merchants to Shopify over the last year, and this strong, symbiotic relationship continues to grow. We believe this ecosystem has grown in part due to the platform's functionality, which is highly extensible and can be expanded through our application program interface ("API") and the approximately 2,500 apps available in the Shopify App Store. The partner ecosystem helps drive the growth of our merchant base, which in turn further accelerates growth of the ecosystem.

Our Offerings

Our business model has two revenue streams: a recurring subscription component we call subscription solutions, and a merchant success-based component we call merchant solutions.

Subscription Solutions

We generate subscription solutions revenues principally through the sale of subscriptions to our platform. We also generate associated subscription solutions revenues from the sale of custom themes and apps and the registration of domain names.

We offer pricing plans designed to meet the needs of our current and prospective merchants. Offering different service and pricing levels allows entrepreneurs to scale without leaving the Shopify platform: as a merchant upgrades to the higher-priced options, they receive more powerful tools. We believe this ability to retain merchants as they grow is an important factor for our success in serving the SMB market. While most merchants subscribe to our Basic and Shopify plans, the majority of our GMV comes from merchants subscribing to our Advanced and Shopify Plus plans. Merchant retention rates are also higher among merchants on higher-priced plans. Offered at a starting rate that is several times that of our Advanced plan, Shopify Plus caters to merchants with higher-volume sales and offers additional functionality, scalability, and support requirements, including a dedicated Merchant Success Manager. Unilever, Kylie Cosmetics, Allbirds, and MVMT are among the approximately 5,300 Shopify Plus merchants leveraging our reliable, cost-effective, and scalable commerce solution.

Our subscription plans typically have a one-month term, however those who sign on to Shopify Plus initially have annual or multi-year subscription terms. Subscription terms automatically renew unless notice of cancellation is provided in advance. Merchants purchase subscription plans directly from us. Subscription fees are paid to us at the start of the applicable subscription period, regardless of the length of the subscription period, with the exception of Shopify Plus subscription contracts, which are paid in arrears on a monthly basis. Subscription fees are non-refundable.

Merchant Solutions

We offer a variety of merchant solutions to augment those provided through a subscription to address the broad array of functionality merchants commonly require, including accepting payments, shipping, and securing working capital. We believe that offering merchant solutions creates additional value for merchants, saving them time and money by making additional functionality available within a single centralized commerce platform, and creates additional value for Shopify by increasing merchants’ use of our platform.

We principally generate merchant solutions revenues from payment processing fees from Shopify Payments. In addition to payment processing fees from Shopify Payments, we also generate merchant solutions revenue from transaction fees, Shopify Shipping, Shopify Capital, referral fees from partners, and sales of point-of-sale (“POS”) hardware.

Shopify Payments is a fully integrated payment processing service that allows our merchants to accept and process payment cards online and offline, and is also designed to drive higher retention among merchant subscribers. We introduced Shopify Payments in the United States and Canada in 2013, and have been expanding into additional geographies in subsequent years. Today, more than two-thirds of our merchants have enabled Shopify Payments. As a result of introducing Shopify Payments, our revenues from merchant solutions and associated costs have increased.

Transaction fees are charged based on a percentage of Gross Merchandise Volume ("GMV") processed on subscription plans where the merchant has not signed up for Shopify Payments.

Shopify Shipping was launched in the United States in September 2015 and in Canada in September 2016, and allows merchants to select from a variety of shipping partners to buy and print outbound and return shipping labels and track orders directly within the Shopify platform.

Shopify Capital was launched in the United States to help eligible merchants secure financing and accelerate the growth of their business by providing access to simple, fast, and convenient working capital. We apply underwriting criteria prior to purchasing the eligible merchant's future receivables or making a loan to help ensure collectibility. Under Shopify Capital, we purchase a designated amount of future receivables at a discount or make a loan. The advance, or the loan, is forwarded to the merchant at the time the related agreement is entered into, and the merchant remits a fixed percentage of their daily sales until the outstanding balance has been remitted. For Shopify Capital MCA's, we apply a percentage of the remittances collected against the merchant's receivable balance, and a percentage, which is related to the discount, as merchant solutions revenue. For Shopify Capital loans, because there is a fixed maximum repayment term, we calculate an effective interest rate based on the merchant's expected future payment volume to determine how much of a merchant's repayment to recognize as revenue and how much to apply against the merchant's receivable balance. We have mitigated some of the risks associated with Shopify Capital by entering into an agreement with a third party to insure MCA's offered by Shopify Capital.

We also generate merchant solutions revenues in the form of referral fees from partners to whom we direct business and with whom we have an arrangement in place. Pursuant to terms of the agreements with our partners, these revenues can be recurring or non-recurring. Where the agreement provides for recurring payments to us, we typically earn revenues so long as the merchant that we have referred to the partner continues to use the services of the partner. Non-recurring revenues generally take the form of one-time payments that we receive when we initially refer the merchant to the partner.

Shopify POS is our mobile application that lets merchants sell their products in a physical or retail setting. While the majority of the POS-compatible hardware we sell has been designed and manufactured by third-party vendors, in 2017 we designed our own POS card reader to better meet the needs of our merchant base and increase the visibility of the Shopify brand, and expanded functionality in 2018 to include tipping, product exchanges, and customer display capabilities. Our POS card reader is available in select geographies.

Seasonality

Our merchant solutions revenues are directionally correlated with the level of GMV that merchants facilitated through our platform. Our merchants typically process additional GMV during the fourth quarter holiday season. As a result, we have historically generated higher merchant solutions revenues in our fourth quarter than in other quarters. While we believe that this seasonality has affected and will continue to affect our quarterly results, our rapid growth has largely masked seasonal trends to date. As a result of the continued growth of our merchant solutions offerings, we believe that our business may become more seasonal in the future and that historical patterns in our business may not be a reliable indicator of our future performance.

Research and Development

Multi-channel commerce, including ecommerce, is a relatively new industry that is rapidly evolving, as mobile device makers continue to innovate on features and functionality, media channels become more interactive, and merchants continually strive to create new ways to stand out in an increasingly digital economy. In addition, traditional brick and mortar retailers seek to join the digital revolution by leveraging their physical presence in new and innovative ways. Shopify strives on behalf of merchants to not just keep pace in this dynamic environment, but to bring to market new and better selling and buying experiences by leveraging what technology and connectivity have made possible.

We look to do this for smaller merchants by simplifying their user experience and arming them with new and innovative ways to compete with larger, better-funded competitors, as well as for larger merchants seeking technology and support for higher volumes and global reach. As such, research and development at Shopify is currently focused on product management, product development, and product design to accomplish these goals. In order to best serve merchants seeking to bridge the gap between in-person and digital commerce, we invest in developing online and point of sale assets with a single commerce operating system, an area of the market we feel is currently underserved. We believe that by deepening the capabilities of our current solution set to meet the needs of more merchants in more geographies, by offering new and better ways for merchants to market and sell their products, and by expanding the range of solutions we offer, we will be able to grow our addressable market and meet the needs of merchants in years ahead. Data analytics and machine learning are increasingly informing our product development efforts and we expect to continue investing in this area.

Growth Strategy

We have focused on rapidly growing our business and plan to continue making investments to drive future growth. We believe that our investments will increase our revenue base, improve the retention of this base, and strengthen our ability to increase sales to our merchants. Our growth strategy is driven by our mission: make commerce better for everyone. Key elements of our strategy include:

- *Grow our Base of Merchants.* We believe that we have a significant opportunity to increase the size of our current merchant base. As such we have a dedicated focus on product and brand marketing paired with global earned media efforts and ongoing content creation and distribution to continue growing this base. We intend to continue to strategically invest in marketing programs that enhance the awareness of our brand and solutions among businesses at different stages of their lifecycle, from entrepreneurs just starting a business to larger, well-established businesses. While we believe it is important to establish relationships early in the business lifecycle and grow along with our merchants, we also see the opportunity from larger businesses looking for faster time-to-market and better value as they innovate to meet rapidly evolving buyer demands. We intend to grow our base of merchants primarily by inspiring entrepreneurship through marketing programs. These include awareness-driving brand campaigns, Shopify blogs, in-person educational and support interactions, such as those in our Los Angeles-based retail space, as well as merchant affinity programs and documentaries featuring entrepreneur success stories. Additionally, we are investing in additional sales capacity focused on larger merchants, as we continue to hire and train outbound sales representatives for Shopify Plus.

- *Grow our Merchants' Revenue.* Our goals are closely aligned with the goals of our merchants. The more a merchant sells on our platform, the more revenue we generate as they process more transactions, upgrade plans, add new sales channels, ship more products, and use additional solutions.

We intend to continue to improve our platform to help our merchants sell more and expect to continue to use initiatives such as our Shopify blogs, Shopify community forums, Shop Class programs, and Shopify space in Los Angeles to educate our merchant base on how they can be even more successful using our platform. Engagement with Shopify blogs increased significantly in 2018, as measured by the 36% increase year over year in the number of browsing sessions across our blogs, which appear in seven different languages.

- *Continuous Innovation and Expansion of our Platform* . Our platform is built to support innovation and the rapid technology changes in commerce. We foresaw the rise of mobile and launched our Shopify Mobile application in 2010. Shopify Mobile gives merchants the ability to set-up, track, and manage their business from anywhere. We intend to continue to build more sales channels and additional functionality to make our merchants more effective and further differentiate our platform. We have done this with Shopify Payments, which eliminates the need for merchants to set up and maintain a direct relationship with a third-party payment gateway, gives merchants access to low credit card processing rates, and allows us to cross-sell additional solutions to our merchant base. We added functionality with Shopify Shipping, which allows merchants to print postage labels and ship products at discounted rates directly through Shopify. We introduced Shopify Capital, which offers growing merchants working capital directly through the Shopify platform. We intend to continue expanding the capabilities of our platform so merchants can not only keep pace with the rapid changes in commerce, but be among the earliest adopters of commerce innovation.

- *Continue to Grow and Develop our Ecosystem* . We have a thriving third-party ecosystem that includes app developers, theme designers, and other partners that bolster the functionality of our platform. Our annual Unite conference demonstrates to partners the opportunities that exist to collaborate in building the future of commerce technology. This ecosystem has grown in part due to the platform's functionality, which is highly extensible and can be expanded through our API. There are currently approximately 2,500 apps available in the Shopify App Store. We believe that growing our ecosystem makes the Shopify platform more attractive and stickier, which further expands our merchant base, and in turn drives additional growth of our ecosystem.

- *Continue to Expand our Referral Partner Programs* . We have strong relationships with thousands of design and marketing agencies throughout the world. These agencies build merchant web and mobile shops on our platform. Approximately 18,000 active partners referred merchants to us in the past 12 months, and we refer work to them using our services marketplace. We intend to strengthen our existing relationships with referral partners and create new ones with the goal of expanding our overall merchant base.

- *Continue to Build for the Long-term* . We have a culture of iteration and experimentation with a focus on maximizing long-term value, and many of our investments are made with an eye toward what we believe merchants will require several years from now. Such longer-term initiatives include localizing the platform for international expansion, promoting our brand, expanding our existing services, introducing new solutions, and entering into strategic partnerships and acquisitions.

Technology

The Shopify platform is a multi-tenant cloud-based system that is engineered for high scalability, reliability, and performance. Open source has played a major role at Shopify from the beginning when our founder was active on the core team that built Ruby on Rails, the technology that powers much of the Shopify platform. We host the Shopify platform using primarily cloud-based servers. Maintaining the integrity and security of our technology infrastructure is critical to our business, and we plan to invest further in our infrastructure to meet our merchants' needs and maintain their trust. Our investment plans include increasingly optimizing our cloud-based infrastructure to increase engineering velocity by redirecting time spent focusing on infrastructure hardware to more value-added software; and better position us for potential changes in data sovereignty regulations globally. The key attributes of the Shopify platform are:

- *Security.* Credit card processing on the Shopify platform is performed by a dedicated, highly scalable, geographically redundant, high-security environment with specialized policies and procedures in place. The environment is designed to be highly isolated and secure and exceeds the requirements of PCI DSS. We have been certified as a PCI DSS Level 1-compliant service provider, which is the highest level of compliance available. We use firewalls, advanced encryption, intrusion detection systems, two-factor authentication, and other technology to keep our merchants' data secure.

- *Scalability.* The cloud-based architecture of our platform has been designed to support sudden traffic and order spikes from our merchants. We use a technology called "containerization" to efficiently scale our computing resources across our platform. We have benchmarked the Shopify platform to handle at least 80,000 requests per second and 12,000 orders per minute based on platform load testing.

- *Reliability.* Our platform includes cloud-based servers that are fault-tolerant and ensure that our platform is highly reliable. Because Shopify is at the heart of our merchants' businesses, we employ a highly redundant, horizontally scalable, shared architecture to ensure resiliency and high availability.

- *Performance.* We believe that the faster and more accessible our merchants' shops appear to their buyers, the more our merchants will sell. We have a dedicated team that is constantly profiling and optimizing the performance of the Shopify platform. We leverage content delivery networks with global points of presence to ensure that content and data is delivered quickly to users across the globe. In 2018, online shops hosted on our platform had sub-100 millisecond median response times; our merchants' shops averaged 261 million unique monthly visitors and almost 2.1 billion monthly browsing sessions, most of which were from mobile devices; and we processed an average of 44.6 million orders per month.

- *Deployment.* The Shopify platform is "single branch" software, which means that all of our merchants use the latest version of Shopify at all times. The result is that we have no overhead in maintaining older versions of our platform. Our software deployment process enables us to quickly distribute new software as soon as it is ready. This is made possible by our ongoing investment in end-to-end automation and comprehensive test suites.

Competition

Our market is transforming, competitive, and highly fragmented, and we expect competition to increase in the future. We believe the principal competitive factors in our market are:

- vision for commerce and product strategy;
- simplicity and ease of use;
- integration of multiple sales channels;
- cost-effective solution;
- vast and growing app ecosystem;
- breadth and depth of functionality;

- pace of innovation;
- powerful data analytics;
- ability to scale;
- security and reliability;
- support for a merchant’s brand development; and
- brand recognition and reputation.

With respect to each of these factors, we believe that we compare favorably to our competitors.

We believe no competitor offers an integrated, multi-channel, cloud-based commerce platform with comparable functionality to ours. However, some merchants may elect to piece together technology that overlaps with our own from other providers such as:

- ecommerce software vendors;
- content management systems;
- payment processors;
- POS software providers;
- domain registrars;
- shipping label providers;
- alternative lenders; and
- marketplaces.

Intellectual Property

Our intellectual property and proprietary rights are important to our business. In our efforts to safeguard them, we rely on a combination of copyright, trade secret, trade dress, domain names, trademarks, and other rights in Canada, the United States, and other jurisdictions in which we conduct our business. We also have confidentiality agreements, assignment agreements, and license agreements with employees, contractors, merchants, distributors, and other third parties, which limit access to and use of our proprietary intellectual property. Though we rely, in part, upon these legal and contractual protections, we believe that factors such as the skills and ingenuity of our employees, as well as the functionality and frequent enhancements to our platform, make our intellectual property difficult to replicate.

We have been issued the following trademark registrations: “SHOPIFY” in Australia, Canada, China, the European Union, Germany, India, Japan, Mexico, New Zealand, Norway, Russia, Singapore, Switzerland and the United States; “S & Design” in Australia, Canada, China, the European Union, India, Japan, Mexico, New Zealand, Norway, Russia and the United States; “S Shopify & Design” in Australia, Canada, China, India, Japan, Mexico, New Zealand, Norway, Russia, Singapore and the United States; “A shop in minutes, a business for life” in Canada and the United States; “Do what you do best” in Canada; “Shopify” in Chinese characters in China; “OBERLO” in Australia and the European Union; “Oberlo Design” in Australia and the European Union; “CODE IN THE DARK” in the European Union and the United States; and “TICTAIL” in Canada, China, Colombia, the European Union, Japan, Mexico, Norway, the Republic of Korea, Russia, Switzerland and the United States.

We are subject to certain risks related to our intellectual property. For more information, see "Risk Factors - Risks Related to our Business and Industry."

Property

We are headquartered in Ottawa, Canada. We do not own any real property. The following table outlines significant properties that we currently lease, all of which are used for office space:

Location	Square Feet	Date Lease Ends
Ottawa, Ontario	449,852	June 30, 2032
Ottawa, Ontario	170,119	December 31, 2026
Toronto, Ontario	253,994	April 1, 2036
Toronto, Ontario	178,387	December 31, 2028
Toronto, Ontario	36,771	April 1, 2021
Toronto, Ontario	33,813	April 1, 2021
Kitchener-Waterloo, Ontario	64,995	July 31, 2028
Kitchener-Waterloo, Ontario	39,173	September 30, 2022
Montreal, Quebec	61,110	June 30, 2027

We also currently lease space in two data centers in the United States.

We believe that our current facilities are adequate to meet our ongoing needs and that, if we require additional space, we will be able to obtain additional facilities on commercially reasonable terms.

Culture and Employees

If you have ambitious goals, you need an equally ambitious team. Shopify is composed of highly talented, deeply caring individuals all working on making commerce better for everyone. Our culture is continuously being redefined with every person that joins our company, but, at our core, we value people who:

- are impactful;
- are merchant obsessed;
- make great decisions quickly;
- thrive on change;
- are constant learners; and
- build for the long term.

In those values, there is a focus on continuous learning and personal development. We are a fast-growing company that is constantly trying to get better. We expect to see similar growth from everyone on our team.

We deeply value innovation and experimentation. Every few months we take a break from our regular work for “Hack Days”, three full days when we encourage our employees to step out of their ‘day jobs’ to tackle a new problem or project that inspires them and adds value to Shopify. “Hack Days” is an expression of Shopify’s culture of innovation and experimentation. Coming together to solve problems outside of their day-to-day work, Shopifolk collaborate across different teams and regions, learn together, and have fun while producing something that will make Shopify better. This global, cross-discipline collaboration promotes a sense of community and belonging on the Shopify team which is especially important as we grow globally and have more employees distributed internationally.

Personal growth and development and constant learning are central to Shopify's culture. We encourage Shopifolk to map their personal learning journey through our "Own Your Own Development" program. Employees can access courses, conferences, and workshops to build their skills and mastery, no matter where they're located.

We believe that being headquartered in Ottawa, Canada gives us access to a large talent pool. Ottawa is currently home to the highest concentration of tech workers in North America, with jobs in technology accounting for 11.2% of total employment in the metropolitan region. We recruit our employees through multiple avenues including internships, campus recruiting, and global outreach.

As of December 31, 2018, we had more than 4,000 employees and contractors worldwide. None of our employees is represented by a labor organization or is a party to a collective bargaining arrangement. We are intentional in building a culture and environment that empowers care and growth in high-impact people. Shopify is consistently among *Glassdoor's Best Places to Work* as rated by employees. Additionally, our most recent employee survey, conducted in January 2019, reflected industry-leading levels of engagement. We consider our relationship with our employees to be excellent.

Government Regulation

We are subject to a number of foreign and domestic laws and regulations that affect companies conducting business on the internet, many of which are still evolving and could be interpreted in ways that could harm our business. Concern about the use of software as a service ("SaaS") platforms for illegal conduct, such as money laundering or supporting terrorist activities, may in the future result in legislation or other governmental action that could require changes to our platform.

We are subject to U.S. and Canadian laws and regulations that govern or restrict our business and activities in certain countries and with certain persons, including the economic sanctions regulations administered by the U.S. Treasury Department’s Office of Foreign Assets Control, the sanctions regulations administered or enforced by the Office of the Superintendent of Financial Institutions in Canada, and the export control laws administered by the U.S. Commerce Department’s Bureau of Industry and Security, the U.S. State Department’s Directorate of Defense Trade Controls and the Canadian Export and Import Controls Bureau. We are currently subject to a variety of laws and regulations in Canada, the United States, the European Economic Area (“EEA”) and elsewhere related to payment processing and financial services. Depending on how Shopify Payments and our other merchant solutions evolve, we may be subject to additional laws in Canada, the United States, the United Kingdom, Australia, Ireland, New Zealand, Singapore, Hong Kong Japan, Germany, Spain, and elsewhere.

We are also subject to federal, state, provincial, and foreign laws regarding cybersecurity, privacy, and the protection of data. Some jurisdictions have enacted laws requiring companies to notify individuals of data security breaches involving certain types of personal information data and our agreements with certain merchants require us to notify them in the event of a security incident. Additionally, some jurisdictions as well as our contracts with certain merchants require us to use industry-standard or reasonable measures to safeguard personal information or confidential information, and thereby mitigate the risk of a security incident.

In addition, our reputation and brand may be negatively affected by the actions of merchants or their users or partners that are deemed to be hostile, offensive, inappropriate or unlawful. We do not proactively monitor or review the appropriateness of the content accessible through merchants’ shops in connection with our services, and we do not have control over the activities in which merchants’ buyers engage. While we have adopted policies regarding illegal or offensive use of our platform, merchants or their customers could nonetheless engage in these activities. The safeguards we have in place may not be sufficient to avoid harm to our reputation and brand, especially if such hostile, offensive or inappropriate use was high profile, which could adversely affect our ability to expand our merchant subscription base and could harm our business and financial results. It is possible that we could also be subject to liability. In many jurisdictions, laws relating to the liability of providers of online services for activities of their customers and other third parties are currently being tested by a number of claims, including actions based on defamation, invasion of privacy and other torts, unfair competition, copyright and trademark infringement, and other theories based on the nature of the relevant content. Any court ruling or other governmental regulation or action that imposes liability on providers of online services in connection with the activities of their customers or their customers' users could harm our business. In such circumstances we may also be subject to liability under applicable law, which may not be fully mitigated by our terms of service. Any liability attributed to us could adversely affect our brand, reputation, ability to expand our subscriber base, and financial results.

GENERAL DEVELOPMENT OF THE BUSINESS

As of December 31, 2018, the Company operated in only a single operating and reportable segment.

Three-Year History

In the fourth quarter of 2018:

Shopify launched its centralized marketing section on the Shopify dashboard where merchants can leverage apps to create, implement, and evaluate marketing campaigns faster and more efficiently, all directly from their Shopify dashboard, helping them reach the right audiences and sell more.

Shopify launched Fraud Protect, a chargeback protection product available to merchants using Shopify Payments that automates order reviews and covers chargeback costs on eligible orders.

Shopify opened its first-ever brick-and-mortar space in Los Angeles featuring Shopify's products, services, and new technology, and serving as a hub where merchants can visit to receive support, inspiration, and education to help grow their business.

In December 2018, Shopify sold 2,600,000 Class A subordinate voting shares at a price to the public of US$154.00 per share, for aggregate gross proceeds to the Company, before underwriting discounts and offering costs, of US$400,400,000, to strengthen its balance sheet to support further growth initiatives.

In the third quarter of 2018:

Shopify announced a partnership with Nest. Shopify merchants can now access camera footage via the newly released Store Cam for Shopify app and purchase Nest Cams and Google Wifi routers directly from the Shopify Hardware Store.

Shopify launched Locations, a multi-location inventory platform that enables merchants to update and track inventory quantities across multiple locations from their Shopify account.

Shopify introduced the new App Store, redesigned to make it easier for merchants to search for, evaluate, and install apps that help them grow their business. It also benefits our partner ecosystem by offering faster discovery of apps by the right merchants.

Shopify launched Shopify AR, making selling with Augmented Reality (AR) accessible for small businesses. Shopify AR has the potential to revolutionize mobile shopping by bringing products to life through 3D models shoppers can size up, examine from all angles, and even place in the environment around them, directly through the Safari browser on iOS 12 devices - without the need for a separate mobile app.

Shopify launched Shopify Payments and a local payment method in Germany, which allows for bank transfers in addition to credit card payments.

In the second quarter of 2018:

Shopify announced enhancements to our POS solution including announcement of (not release of) a new premium Tap and Chip reader as well as upgrades enabling multi-channel returns and exchanges, in-store pickup, tipping options, a companion app for a customer-facing checkout experience, and a developer SDK.

Shopify announced simplifications to merchants' marketing processes, including a native marketing dashboard, easy-to-use BOGO and quantity discounts, and Dynamic Checkout, which surfaces the consumer's preferred payment method directly on the product page and allows transactions to happen with a single tap using Shopify Pay, Apple Pay, and other wallets.

At our partner conference, Shopify Unite, Shopify announced back office workflow efficiencies like multi-location inventory management, Fraud Protect for protection from fraudulent chargebacks, Kit Skills app extensions, Shopify Ping to centralize business and marketing activities and conversations, and localization of the Shopify platform for native languages and payment methods.

In the first quarter of 2018:

Shopping on Instagram was expanded beyond the US to the UK, Australia, Canada, Germany, France, Italy, Spain, and Brazil.

Shopify launched an integration with Google Pay on Shopify stores, allowing hundreds of millions of shoppers to experience an accelerated checkout.

In February 2018, Shopify sold 4,800,000 Class A subordinate voting shares at a price to the public of US$137.00 per share, for aggregate gross proceeds to the Company, before underwriting discounts and offering costs, of US$657,600,000, to strengthen its balance sheet to support further growth initiatives.

Shopify appointed Amy Shapero as its new Chief Financial Officer to replace Russ Jones, who retired after serving as Shopify's CFO since 2011.

Shopify launched Shopify Payments in Japan.

In the fourth quarter of 2017:

Shopify added both DHL and UPS, in October and November, respectively, as new shipping partners to offer U.S. merchants greater choice for competitive shipping rates.

In the third quarter of 2017:

Shopify's Instagram channel was made available in a limited release to tens of thousands of merchants in October 2017. Merchants in categories like fashion, jewelry, beauty, furniture, and home decor, are able to tag posts with products in Instagram's apps to showcase to over 800 million monthly active Instagram users.

Shopify announced the addition of the largest global fashion search engine, Lyst, enabling merchants to reach new audiences in the U.S., U.K., Germany, Sweden, Finland, and Austria they may not have been able to capture before.

Shopify expanded shipping capabilities beyond single label printing in September 2017, adding bulk label printing to Shopify Shipping and integrated DHL Express as an international shipping option at discounted rates for merchants based in the U.S.

Shopify announced in August 2017 that it powers more than 500,000 businesses in approximately 175 countries around the world.

Shopify began shipping pre-orders of its Chip and Swipe Reader to merchants in July 2017, enhancing our point-of-sale channel, the second-largest channel for GMV.

In the second quarter of 2017:

Shopify announced the integration of eBay as a channel for merchants in July 2017. The channel, which went live in October 2017, enables Shopify merchants to surface their brand and products to more than 168 million active eBay buyers, while managing eBay orders, inventory and messages from within Shopify.

Shopify announced the integration of BuzzFeed as a channel for merchants in June 2017, paving a new way for media and publishers to drive revenue. The new channel allows merchants to easily tag products for BuzzFeed editors to search, find, and feature in its campaigns, product lists and onsite content for its audience of more than 200 million.

Shopify Pay, a feature designed to increase conversion at checkout by streamlining the checkout process, especially on mobile devices, went live to all merchants using Shopify Payments.

Shopify completed a public offering in May 2017 of 6,325,000 Class A subordinate voting shares. The aggregate net proceeds to the Company of US$575,575,000 strengthened Shopify's balance sheet and provided flexibility to fund growth strategies.

Shopify acquired Oberlo UAB ("Oberlo"), a company that allows merchants to find products to sell, import them directly into their Shopify store, and ship those products directly to customers.

In the first quarter of 2017:

Shopify announced the Wholesale Channel for Shopify Plus, which enables Shopify Plus merchants to create a separate, password-protected storefront, managed within their existing store. Merchants can invite buyers to purchase products at assigned wholesale prices, creating a more efficient way to manage customer bulk ordering in one place, without two systems or workarounds.

Over one thousand Shopify Partners and Developers from around the world gathered in San Francisco in April 2017 to discuss the future of Shopify, commerce, and technology at our partner conference, Shopify Unite.

In 2016:

Orders on mobile surpassed those on desktop for the first time ever, with just over 51% of orders at the end of the first quarter of 2016 coming from mobile devices.

Shopify hosted its first-ever partner conference, Unite, in San Francisco, and also launched a new partner program specifically for Shopify Plus.

Shopify launched Shopify Capital, offering merchant cash advances to select merchants, and later in the year entered into an agreement with Export Development Canada to help insure merchant cash advances offered by Shopify Capital.

Shopify completed two acquisitions: of Kit CRM Inc. ("Kit"), a virtual marketing assistant, to strengthen our capabilities in messaging and conversational commerce; and of Boltmade, a product design and development consultancy to help accelerate the development of the Shopify Plus product offering.

Shopify completed a follow-on public offering in August 2016 of 8,625,000 Class A subordinate voting shares.

Shopify announced that our merchants would be among the first to be able to accept Apple Pay and Android Pay (now called Google Pay) for web orders on mobile.

Shopify expanded Shopify Shipping into Canada, integrating Canada Post as a shipping partner.

Shopify became the first commerce platform to integrate with Facebook’s new Messenger Platform. The integration allows merchants to provide live customer support, and to automatically send order confirmations, shipping updates, and push notifications within Facebook Messenger.

Shopify’s Sell on Amazon integration was made generally available to merchants in December, enabling merchants to manage their product catalog for Amazon and their other sales channels in one place.

RISK FACTORS

In addition to any other risks contained in this AIF, as well as our "Management’s Discussion and Analysis" and our audited financial statements and related notes, the risks described below are the principal risks that could have a material and adverse effect on our business, financial condition, results of operations, cash flows, future prospects or the trading price of our Class A subordinate voting shares. This AIF also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of a number of factors, including the risks described below. See "Forward-Looking Information."

Risks Related to Our Business and Industry

Our rapid growth may not be sustainable and depends on our ability to attract new merchants, retain revenue from existing merchants and increase sales to both new and existing merchants.

We principally generate revenues through the sale of subscriptions to our platform and the sale of additional solutions to our merchants. Our subscription plans typically have a one-month term, although a small percentage of our merchants have annual or multi-year subscription terms. Our merchants have no obligation to renew their subscriptions after their subscription term expires. As a result, even though the number of merchants using our platform has grown rapidly in recent years, there can be no assurance that we will be able to retain these merchants. We have historically experienced merchant turnover as a result of many of our merchants being SMBs that are more susceptible than larger businesses to general economic conditions and other risks affecting their businesses. Many of these SMBs are in the entrepreneurial stage of their development and there is no guarantee that their businesses will succeed. Our costs associated with subscription renewals are substantially lower than costs associated with generating revenue from new merchants or costs associated with generating sales of additional solution to existing merchants. Therefore, if we are unable to retain revenue from existing merchants or if we are unable to increase revenues from existing merchants, even if such losses are offset by an increase in new merchants or an increase in other revenues, our operating results could be adversely impacted.

We may also fail to attract new merchants, retain revenue from existing merchants or increase sales to both new and existing merchants as a result of a number of other factors, including: reductions in our current or potential merchants’ spending levels; competitive factors affecting the software as a service ("SaaS") business software applications market, including the introduction of competing platforms, discount pricing and other strategies that may be implemented by our competitors; our ability to execute on our growth strategy and operating plans; a decline in the number of entrepreneurs; a decline in our merchants’ level of satisfaction with our platform and merchants’ usage of our platform; the difficulty and cost to switch to a competitor may not be significant for many of our merchants; changes in our relationships with third parties, including our partners, app developers, theme designers, referral sources and payment processors; the timeliness and success of new products and services we may offer in the future; concerns relating to actual or perceived security breaches; the frequency and severity of any system outages; technological changes or problems; and our focus on long-term value over short-term results, meaning that we may make strategic decisions that may not maximize our short-term revenue or profitability if we believe that the decisions are consistent with our mission and will improve our financial performance over the long-term.

Additionally, we anticipate that our growth rate will decline over time to the extent that the number of merchants using our platform increases and we achieve higher market penetration rates. As our growth rate declines, investors' perception of our business may be adversely affected and the trading price of our Class A subordinate voting shares could decline as a result. To the extent our growth rate slows, our business performance will become increasingly dependent on our ability to retain revenue from existing merchants and increase sales to existing merchants.

Our business could be harmed if we fail to manage our growth effectively.

The rapid growth we have experienced in our business places significant demands on our operational infrastructure. The scalability and flexibility of our platform depends on the functionality of our technology and network infrastructure and its ability to handle increased traffic and demand for bandwidth. The growth in the number of merchants using our platform and the number of orders processed through our platform has increased the amount of data and requests that we process. Any problems with the transmission of increased data and requests could result in harm to our brand or reputation. Moreover, as our business grows, we will need to devote additional resources to improving our operational infrastructure and continuing to enhance its scalability in order to maintain the performance of our platform.

Our growth has placed, and will likely continue to place, a significant strain on our managerial, administrative, operational, financial and other resources. We have grown from approximately 3,000 employees and contractors at December 31, 2017 to over 4,000 employees and contractors at December 31, 2018 . We intend to further expand our overall business, including headcount, with no assurance that our revenues will continue to grow. As we grow, we will be required to continue to improve our operational and financial controls and reporting procedures and we may not be able to do so effectively. In addition, as we have grown, we have significantly expanded our lease commitments and we plan to further expand such commitments. Furthermore, some members of our management do not have significant experience managing a large global business operation, so our management may not be able to manage such growth effectively. As such, we may be unable to manage our expenses effectively in the future, which may negatively impact our gross profit or operating expenses. We are also subject to the risks of over-hiring and/or over-compensating our employees and over-expanding our operating infrastructure.

In addition, we believe that an important contributor to our success has been our corporate culture, which we believe fosters innovation, teamwork and passion for our merchants and a focus on attractive design and technologically advanced and well-crafted software. Most of our employees have been with us for fewer than two years as a result of our rapid growth. As we continue to grow, we must effectively integrate, develop and motivate a growing number of new employees, some of whom are based in various countries around the world, and we must effectively preserve our ability to execute quickly on new features and initiatives. As a result, we may find it difficult to maintain our corporate culture, which could limit our ability to innovate and operate effectively. Any failure to preserve our culture could also negatively affect our ability to retain and recruit personnel, to continue to perform at current levels or to execute on our business strategy effectively and efficiently.

We have a history of losses and we may be unable to achieve profitability.

We incurred net losses of $80.2 million in 2018 , $34.7 million in 2017 , and $35.4 million in 2016 . At December 31, 2018 , we had an accumulated deficit of $187.8 million . These losses and accumulated deficit are a result of the substantial investments we made to grow our business and we expect to make significant expenditures to expand our business in the future. We expect to increase our investment in sales and marketing as we continue to spend on marketing activities and expand our partner referral programs. We plan to increase our investment in research and development as we continue to introduce new products and services to extend the functionality of our platform. We also intend to invest in maintaining our high level of merchant service and support, which we consider critical for our continued success. In order to support the continued growth of our business and to meet the demands of continuously changing security and operational requirements, we plan to continue investing in our data center and network infrastructure. These increased expenditures will make it harder for us to achieve profitability and we cannot predict if we will achieve profitability in the near term or at all. Historically, our costs have increased each year due to these factors and we expect to continue to incur increasing costs to support our anticipated future growth. We also expect to incur additional general and administrative expenses as a result of both our growth. If the costs associated with acquiring new merchants materially rise in the future, including the fees we pay to third parties to market our platform, our expenses may rise significantly. If we are unable to generate adequate revenue growth and manage our expenses, we may continue to incur significant losses and may not achieve or maintain profitability.

We may make decisions that would reduce our short-term operating results if we believe those decisions will improve the experiences of our merchants and their buyers and if we believe such decisions will improve our operating results over the long term. These decisions may not be consistent with the expectations of investors and may not produce the long-term benefits that we expect, in which case our business may be materially and adversely affected.

Our limited operating history in new and developing markets and new geographic regions makes it difficult to evaluate our current business and future prospects and may increase the risk that we will not be successful.

We launched the Shopify platform in 2006 and the majority of our revenue growth has occurred in the past few years. This makes it difficult to accurately assess our future prospects. We also operate in new and developing markets that may not develop as we expect. You should consider our future prospects in light of the challenges and uncertainties that we face, including the fact that our business has grown rapidly and it may not be possible to fully discern the trends that we are subject to, that we operate in new and developing markets, and that elements of our business strategy are new and subject to ongoing development. We have encountered and will continue to encounter risks and difficulties frequently experienced by growing companies in rapidly changing industries, including increasing and unforeseen expenses as we continue to grow our business. If we do not manage these risks successfully, our business, results of operations and prospects will be harmed.

Our future success will depend in part upon our ability to expand into new geographic regions, and we will face risks entering markets in which we have limited or no experience and in which we do not have any brand recognition. It is costly to establish, develop and maintain international operations, and to promote our brand internationally. In addition, expanding into new geographic regions where the main language is not English will require substantial expenditures and take considerable time and attention, and we may not be successful enough in these new markets to recoup our investments in a timely manner, or at all. Our efforts to expand into new geographic regions may not be successful, which could limit our ability to grow our business.

If we fail to improve and enhance the functionality, performance, reliability, design, security and scalability of our platform in a manner that responds to our merchants' evolving needs, our business may be adversely affected.

The markets in which we compete are characterized by constant change and innovation and we expect them to continue to evolve rapidly. Our success has been based on our ability to identify and anticipate the needs of our merchants and design and maintain a platform that provides them with the tools they need to operate their businesses. Our ability to attract new merchants, retain revenue from existing merchants and increase sales to both new and existing merchants will depend in large part on our ability to continue to improve and enhance the functionality, performance, reliability, design, security and scalability of our platform.

Furthermore, as we expand Shopify Plus, and as the number of our merchants with higher volume sales increases, so does the need for us to offer increased functionality, scalability and support, which requires us to devote additional resources to such efforts. To the extent we are not able to enhance our platform's functionality in order to maintain its utility, enhance our platform's scalability in order to maintain its performance and availability, or improve our support function in order to meet increased demands, our business, operating results and financial condition could be adversely affected.

We may experience difficulties with software development that could delay or prevent the development, introduction or implementation of new solutions and enhancements. Software development involves a significant amount of time for our research and development team, as it can take our developers months to update, code and test new and upgraded solutions and integrate them into our platform. We must also continually update, test and enhance our software platform. For example, our design team spends a significant amount of time and resources incorporating various design enhancements, such as customized colors, fonts, content and other features, into our platform. The continual improvement and enhancement of our platform requires significant investment and we may not have the resources to make such investment. Our improvements and enhancements may not result in our ability to recoup our investments in a timely manner, or at all. We may make significant investments in new solutions or enhancements that may not achieve expected returns. The improvement and enhancement of the functionality, performance, reliability, design, security and scalability of our platform is expensive and complex, and to the extent we are not able to perform it in a manner that responds to our merchants' evolving needs, our business, operating results and financial condition will be adversely affected.

Security breaches, denial of service attacks, or other hacking and phishing attacks on our systems or other security breaches could delay or interrupt service to our merchants and their buyers, harm our reputation or subject us to significant liability, and adversely affect our business and financial results.

We operate in an industry that is prone to cyber attacks. Failure to prevent or mitigate security breaches and improper access to or disclosure of our data, our merchant's data, or their buyers' data, could result in the loss or misuse of such data, which could harm our business and reputation. The security measures we have integrated into our internal networks and platform, which are designed to prevent or minimize security breaches, may not function as expected or may not be sufficient to protect our internal networks and platform against certain attacks. In addition, techniques used to sabotage or to obtain unauthorized access to networks in which data is stored or through which data is transmitted change frequently. As a result, we may be unable to anticipate these techniques or implement adequate preventative measures to prevent an electronic intrusion into our networks.

Our merchants' storage and use of data concerning their shops and their buyers is essential to their use of our platform, which stores, transmits and processes our merchants' proprietary information and personal information relating to them and their buyers. If a security breach were to occur, as a result of third-party action, employee error, malfeasance, or otherwise, and the confidentiality, integrity or availability of our merchants' data was disrupted, we could incur significant liability to our merchants and to individuals whose information was being stored by our merchants, and our platform may be perceived as less desirable, which could negatively affect our business and damage our reputation.

In the past, we have been subject to distributed denial of service, or DDoS attacks, a technique used by hackers to take an internet service offline by overloading its servers. A DDoS attack or security breach could delay or interrupt service to our merchants and their buyers and may deter consumers from visiting our merchants' shops. Our platform and third-party apps may be subject to DDoS attacks in the future and we cannot guarantee that applicable recovery systems, security protocols, network protection mechanisms and other procedures are or will be adequate to prevent network and service interruption, system failure or data loss. In addition, computer malware, viruses, and hacking and phishing attacks by third parties are prevalent in our industry. We have experienced such attacks in the past and may experience such attacks in the future. As a result of our increased visibility, we believe that we are increasingly a target for such breaches and attacks.

Moreover, our platform and third-party apps available for our platform could be breached if vulnerabilities in our platform or third-party apps are exploited by unauthorized third parties or due to employee error, malfeasance, or otherwise. Further, third parties may attempt to fraudulently induce employees or merchants into disclosing sensitive information such as user names, passwords or other information or otherwise compromise the security of our internal networks, electronic systems and/or physical facilities in order to gain access to our data or our merchants' data. Since techniques used to obtain unauthorized access change frequently and the size and severity of DDoS attacks and security breaches are increasing, we may be unable to implement adequate preventative measures or stop DDoS attacks or security breaches while they are occurring. In addition to our own platform and apps, some of the third parties we work with may receive information provided by us, by our merchants, or by our merchants' buyers through web or mobile applications integrated with Shopify. If these third parties fail to adhere to adequate data security practices, or in the event of a breach of their networks, our own and our merchants' data may be improperly accessed, used or disclosed.

Any actual or perceived DDoS attack or security breach could damage our reputation and brand, expose us to a risk of litigation and possible liability and require us to expend significant capital and other resources to respond to and/or alleviate problems caused by the DDoS attack or security breach. Some jurisdictions have enacted laws requiring companies to notify individuals of data security breaches involving certain types of personal data and our agreements with certain merchants and partners require us to notify them in the event of a security incident. Such mandatory disclosures are costly, could lead to negative publicity, and may cause our merchants to lose confidence in the effectiveness of our data security measures. Moreover, if a high profile security breach occurs with respect to another SaaS provider, merchants may lose trust in the security of the SaaS business model generally, which could adversely impact our ability to retain revenue from existing merchants or attract new ones. Similarly, if a high profile security breach occurs with respect to a retailer or ecommerce platform, buyers may lose trust in ecommerce more generally, which could adversely impact our merchants' businesses.Any of these events could harm our reputation or subject us to significant liability, and materially and adversely affect our business and financial results.

Payment transactions on Shopify Payments may subject us to regulatory requirements, additional fees, and other risks that could be costly and difficult to comply with or that could harm our business.

We are subject to a number of risks related to payments processed through Shopify Payments, an integrated payment processing solution that allows our merchants to accept payments on major payment card s and payment networks. Such risks include:

- we pay interchange and other fees on these transactions, which may increase our operating expenses;
- if we are unable to maintain our chargeback rate at acceptable levels, our credit card fees may increase or credit card issuers may terminate their relationship with us or with particular merchants on our platform;
- increased costs and diversion of management time and effort and other resources to deal with fraudulent transactions or chargeback disputes;
- potential fraudulent or otherwise illegal activity by merchants, their buyers, developers, employees or third parties which could lead to increased liabilities;
- restrictions on funds or required reserves related to payments; and
- additional disclosure and other requirements, including new reporting regulations and new credit card association rules.

We are required by our payment processors to comply with payment card network operating rules and we have agreed to reimburse our payment processors for any fees or fines they are assessed by payment card networks as a result of any rule violations by us or our merchants. The payment card networks set and interpret the card rules. In addition, we face the risk that one or more payment card networks or other processors may, at any time, assess penalties against us, against our merchants, or terminate our ability to accept credit card payments or other forms of online payments from buyers, which would have an adverse effect on our business, financial condition and operating results.

If we fail to comply with the payment card network rules, including the PCI DSS, we would be in breach of our contractual obligations to our payment processors, financial institutions, partners and merchants. Such failure to comply may subject us to fines, penalties, damages, higher transaction fees and civil liability, and could eventually prevent us from processing or accepting payment cards or could lead to a loss of payment processor partners, even if there is no compromise of customer information.

We are currently subject to a variety of laws and regulations in Canada, the United States, the United Kingdom, Ireland, Australia, New Zealand, Singapore, Hong Kong, Japan, Germany, Spain, and elsewhere related to payment processing, including those governing cross-border and domestic money transmission, gift cards and other prepaid access instruments, electronic funds transfers, foreign exchange, anti-money laundering, counter-terrorist financing, banking and import and export restrictions. Depending on how Shopify Payments and our other merchant solutions evolve, we may be subject to additional laws, either in existing or new jurisdictions. In some jurisdictions, the application or interpretation of these laws and regulations is not clear. Our efforts to comply with these laws and regulations could be costly and result in diversion of management time and effort and may still not guarantee compliance. In the event that we are found to be in violation of any such legal or regulatory requirements, we may be subject to monetary fines or other penalties such as a cease and desist order, or we may be required to make changes to our platform, any of which could have an adverse effect on our business, financial condition and results of operations.

We rely on a single supplier to provide the technology we offer through Shopify Payments.

In order to provide Shopify Payments, we have entered into payment service provider agreements with Stripe Inc. ("Stripe"). These payment service provider agreements currently automatically renew every 12 months, unless either party terminates the agreement earlier upon 180 days' notice. These agreements are integral to Shopify Payments and any disruption or problems with Stripe or its services could have an adverse effect on our reputation, results of operations and financial results. If Stripe were to terminate its relationship with us, we could incur substantial delays and expense in finding and integrating an alternative payment service provider into Shopify Payments, and the quality and reliability of such alternative payment service provider may not be comparable. Any long-term or permanent disruption in Shopify Payments would decrease our revenues from merchant solutions, since our merchants would be required to use one of the alternative payment gateways offered through our platform.

We store personal information of our merchants and their buyers. If the security of this information is compromised or is otherwise accessed without authorization, our reputation may be harmed and we may be exposed to liability and loss of business.

We store personal information, credit card information and other confidential information of our partners, our merchants and their buyers, and consumers with whom we have a direct relationship. Mobile applications integrated with Shopify and the third-party apps available for our platform may also store personal information, credit card information and/or other confidential information. We do not proactively monitor the content that our merchants upload and store, or the information provided to us through the applications integrated with Shopify, and, therefore, we do not control the substance of the content on our servers, which may include personal information. Additionally, we use dozens of third party service providers and subprocessors to help us deliver services to merchants and their buyers. These service providers and subprocessors may store personal information, credit card information and/or other confidential information. There has in the past and there may in the future be successful attempts by third parties to obtain unauthorized access to the personal information of our partners, our merchants, our merchants' buyers, and consumers with whom we have a direct relationship. This information could also be otherwise exposed through human error, malfeasance or otherwise. The unauthorized release, unauthorized access or compromise of this information could have a material adverse effect on our business, financial condition and results of operations. Even if such a data breach did not arise out of our actions or inactions, or if it were to affect one or more of our competitors or our merchants' competitors, rather than Shopify itself, the resulting consumer concern could negatively affect our merchants and/or our business.

We are also subject to federal, state, provincial and foreign laws regarding cybersecurity and the protection of data. Some jurisdictions have enacted laws requiring companies to notify individuals of security breaches involving certain types of personal information and our agreements with certain merchants and partners require us to notify them in the event of certain security incidents. Additionally, some jurisdictions, as well as our contracts with certain merchants, require us to use industry-standard or reasonable measures to safeguard personal information or confidential information. These laws, which tend to focus around individuals' financial and payment related information, are increasingly relevant to us, as we have started to collect and store more payment information from our merchants' buyers through services such as Shopify Pay.

Our failure to comply with legal or contractual requirements around the security of personal information could lead to significant fines and penalties imposed by regulators, as well as claims by our merchants, their buyers, or other relevant stakeholders. These proceedings or violations could force us to spend money in defense or settlement of these proceedings, result in the imposition of monetary liability or injunctive relief, divert management's time and attention, increase our costs of doing business, and materially adversely affect our reputation and the demand for our solutions. In addition, if our security measures fail to protect credit card information adequately, we could be liable to our partners, our merchants , their buyers, and consumers with whom we have a direct relationship, for their losses, as well as our payments processing partners under our agreements with them. As a result, we could be subject to fines and higher transaction fees, we could face regulatory or other legal action, and our merchants could end their relationships with us. There can be no assurance that the limitations of liability in our contracts would be enforceable or adequate or would otherwise protect us from any such liabilities or damages with respect to any particular claim. We also cannot be sure that our existing insurance coverage and coverage for errors and omissions will continue to be available on acceptable terms or will be available in sufficient amounts to cover one or more large claims, or that our insurers will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have an adverse effect on our business, financial condition and results of operations.

Evolving privacy laws and regulations, cross-border data transfer restrictions, data localization requirements, and other domestic or foreign laws or regulations may limit the use and adoption of our services, expose us to liability, or otherwise adversely affect our business.

Laws and regulations related to data privacy and the collection, processing, and disclosure of consumer personal information are constantly evolving. Many of these laws and regulations, including Canada's Personal Information Protection and Electronic Documents Act, and the European Union's General Data Protection Regulation contain detailed requirements regarding collecting and processing personal information, and impose certain limitations on how such information may be used, the length for which it may be stored, and the effectiveness of consumer consent. Such laws and regulations could restrict our ability to store and process personal data (in particular, our ability to use certain data for purposes such as risk or fraud avoidance, marketing, or advertising), our ability to control our costs by using certain vendors or service providers, or impact our ability to offer certain services in certain jurisdictions. Moreover, such laws could restrict our merchants' ability to run their businesses, for example by limiting their ability to effectively market or advertise to interested buyers. This could reduce our revenues and the general demand for our services. Additionally, such laws and regulations are often inconsistent and may be subject to amendment or re-interpretation, which may cause us to incur significant costs and expend significant effort to ensure compliance. Given that requirements may be inconsistent and evolving, how we choose to respond to these requirements globally may not meet the expectations of individual merchants, their buyers, or other stakeholders, which could thereby reduce the demand for our services. Finally, some merchants or other service providers may respond to these evolving laws and regulations by asking us to make certain privacy or data related contractual commitments that we are unable or unwilling to make. This could lead to the loss of current or prospective merchants or other business relationships.

Certain laws and regulations, like the European Union's General Data Protection Regulation, also include restrictions on the transfer of personal information across state borders. Because our services are accessible worldwide, certain foreign jurisdictions may claim that we are required to comply with such laws even in jurisdictions where we have no local entity, employees or infrastructure. Some of these laws include strict localization provisions that require certain data to be stored within a particular region or jurisdiction. We rely on a globally distributed infrastructure in order to be able to provide our services efficiently, and consequently may not be able to meet the expectations of merchants who are located in or otherwise subject to such localization requirements, which may reduce the demand for our services.

Other laws and regulations, like the European Union's General Data Protection Regulation, presumptively prohibit cross-border data transfers absent an "adequacy mechanism" that provides some assurances as to the treatment and protection of such data. We rely on a variety of these adequacy mechanisms, including the EU-U.S. Privacy Shield, European Commission Decision 2002/2/EC regarding the adequacy of Canadian law, and eventually Binding Corporate Rules, to enable us to provide our services around the globe at scale. If we are no longer able to rely on a particular adequacy mechanism or are otherwise unable to transfer personal information across borders, we may not be able to operate in certain jurisdictions, which may reduce the demand for our services and limit our opportunities for international growth.

Beyond impacting the demand for our services, our failure to comply with these laws or regulations could expose us to significant fines and penalties imposed by regulators, as well as legal claims by our merchants, or their buyers, or other relevant stakeholders. Similarly, many of these laws require us to maintain an online privacy policy and terms of service that disclose our practices regarding the collection, processing, and disclosure of personal information. If these disclosures contain any information that a court or regulator finds to be inaccurate, we could also be exposed to legal or regulatory liability. Any such proceedings or violations could force us to spend money in defense or settlement of these proceedings, result in the imposition of monetary liability or demanding injunctive relief, divert management's time and attention, increase our costs of doing business, and materially adversely affect our reputation.

If we are unable to hire, retain and motivate qualified personnel, our business will suffer.

Our future success depends, in part, on our ability to continue to attract and retain highly skilled personnel. Our ability to identify, hire, develop, motivate and retain qualified personnel will directly affect our ability to maintain and grow our business, and such efforts will require significant time, expense and attention. The inability to attract or retain qualified personnel or delays in hiring required personnel may seriously harm our business, financial condition and operating results. Our ability to continue to attract and retain highly skilled personnel, specifically employees with technical and engineering skills and employees with high levels of experience in designing and developing software and internet-related services, will be critical to our future success. Competition for highly skilled personnel in the Ottawa area, Greater Toronto area, Montreal area, Kitchener-Waterloo area, San Francisco Bay area, Western Europe and Asia and elsewhere can be intense due in part to the more limited pool of qualified personnel as compared to other places in the world, and we have experienced difficulties hiring employees from foreign jurisdictions to work in our offices. Further, decreases in the Canadian dollar relative to the U.S. dollar and other currencies could make it more difficult for us to offer compensation packages to new employees that are competitive with packages in the United States or elsewhere and could increase our costs of acquiring and retaining qualified personnel. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited or divulged proprietary or other confidential information. While we intend to issue stock options or other equity awards as key components of our overall compensation and employee attraction and retention efforts, we are required under U.S. GAAP to recognize compensation expense in our operating results for employee stock-based compensation under our equity grant programs which may increase the pressure to limit stock-based compensation.

Our business is susceptible to risks associated with international sales and the use of our platform in various countries.

We currently have merchants in approximately 175 countries and we expect to continue to expand our international operations in the future. However, our international sales and the use of our platform in various countries subject us to risks that we do not generally face with respect to domestic sales within North America. These risks include, but are not limited to:

- greater difficulty in enforcing contracts, including our universal terms of service and other agreements;
- lack of familiarity and burdens and complexity involved with complying with multiple, conflicting and changing foreign laws, standards, regulatory requirements, tariffs, export controls and other barriers;
- difficulties in ensuring compliance with countries' multiple, conflicting and changing international trade, customs and sanctions laws;
- data privacy laws which may require that merchant and customer data be stored and processed in a designated territory;
- difficulties in managing systems integrators and technology partners;
- differing technology standards;
- potentially adverse tax consequences, including the complexities of foreign value-added tax (or other tax) systems and restrictions on the repatriation of earnings;
- uncertain political and economic climates;
- difficulties in ensuring compliance with government regulations of ecommerce and other services, which could lead to lower adoption rates, and potentially restrictive governmental actions, and restrictions on foreign ownership;
- lower levels of credit card usage and increased payment risks;
- currency exchange rates;
- reduced or uncertain protection for intellectual property rights in some countries;
- new and different sources of competition;
- lower levels of consumer spending; and
- restricted access to and/or lower levels of use of the internet.

These factors may cause our international costs of doing business to exceed our comparable domestic costs and may also require significant management attention and financial resources. Any negative impact from our international business efforts could adversely affect our business, results of operations and financial condition.

Our business is highly competitive. We may not be able to compete successfully against current and future competitors.

We face competition in various aspects of our business and we expect such competition to intensify in the future, as existing and new competitors introduce new services or enhance existing services. We have competitors with longer operating histories, larger customer bases, greater brand recognition, greater experience and more extensive commercial relationships in certain jurisdictions, and greater financial, technical, marketing and other resources than we do. Our potential new or existing competitors may be able to develop products and services better received by merchants or may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, regulations or merchant requirements. In addition, some of our larger competitors may be able to leverage a larger installed customer base and distribution network to adopt more aggressive pricing policies and offer more attractive sales terms, which could cause us to lose potential sales or to sell our solutions at lower prices.

Competition may intensify as our competitors enter into business combinations or alliances or raise additional capital, or as established companies in other market segments or geographic markets expand into our market segments or geographic markets. For instance, certain competitors could use strong or dominant positions in one or more markets to gain a competitive advantage against us in areas where we operate including: by integrating competing platforms or features into products they control such as search engines, web browsers, mobile device operating systems or social networks; by making acquisitions; or by making access to our platform more difficult. Further, current and future competitors could choose to offer a different pricing model or to undercut prices in an effort to increase their market share. We also expect new entrants to offer competitive services. If we cannot compete successfully against current and future competitors, our business, results of operations and financial condition could be negatively impacted.

If our software contains serious errors or defects, we may lose revenue and market acceptance and may incur costs to defend or settle claims with our merchants.

Software such as ours often contains errors, defects, security vulnerabilities or software bugs that are difficult to detect and correct, particularly when first introduced or when new versions or enhancements are released. Despite internal testing, our platform may contain serious errors or defects, security vulnerabilities or software bugs that we may be unable to successfully correct in a timely manner or at all, which could result in lost revenue, significant expenditures of capital, a delay or loss in market acceptance, and damage to our reputation and brand, any of which could have an adverse effect on our business, financial condition and results of operations. Furthermore, our platform is a multi-tenant cloud based system that allows us to deploy new versions and enhancements to all of our merchants simultaneously. To the extent we deploy new versions or enhancements that contain errors, defects, security vulnerabilities or software bugs to all of our merchants simultaneously, the consequences would be more severe than if such versions or enhancements were only deployed to a smaller number of our merchants.

Since our merchants use our services for processes that are critical to their businesses, errors, defects, security vulnerabilities, service interruptions or software bugs in our platform could result in losses to our merchants. Our merchants may seek significant compensation from us for any losses they suffer or cease conducting business with us altogether. Further, a merchant could share information about bad experiences on social media, which could result in damage to our reputation and loss of future sales. There can be no assurance that provisions typically included in our agreements with our merchants that attempt to limit our exposure to claims would be enforceable or adequate or would otherwise protect us from liabilities or damages with respect to any particular claim. Even if not successful, a claim brought against us by any of our merchants would likely be time-consuming and costly to defend and could seriously damage our reputation and brand, making it harder for us to sell our solutions.

Exchange rate fluctuations may negatively affect our results of operations.

While most of our revenues are denominated in U.S. dollars, a significant portion of our operating expenses are incurred in Canadian dollars. As a result, our results of operations will be adversely impacted by an increase in the value of the Canadian dollar relative to the U.S. dollar. Exchange rate fluctuations may also affect our merchant solutions. For example, we generate revenue through Shopify Payments in the local currency of the country in which the applicable merchant is located. As a result, we will be further exposed to currency fluctuations to the extent non-U.S. dollar revenues from Shopify Payments increase. The value of the Canadian dollar relative to the U.S. dollar has varied significantly in the past and investors are cautioned that past and current exchange rates are not indicative of future exchange rates.

We may be unable to achieve or maintain data transmission capacity.

Our merchants often draw significant numbers of consumers to their shops over short periods of time, including from events such as new product releases, holiday shopping seasons and flash sales, which significantly increases the traffic on our servers and the volume of transactions processed on our platform. Our servers may be unable to achieve or maintain data transmission capacity high enough to handle increased traffic or process orders in a timely manner. Our failure to achieve or maintain high data transmission capacity could significantly reduce demand for our solutions. Further, as we continue to attract larger merchants, the volume of transactions processed on our platform will increase, especially if such merchants draw significant numbers of consumers over short periods of time. In the future, we may be required to allocate resources, including spending substantial amounts of money, to build, purchase or lease additional data centers and equipment and upgrade our technology and network infrastructure in order to handle the increased load. Our ability to deliver our solutions also depends on the development and maintenance of internet infrastructure by third parties, including by our cloud service provider. Such development and maintenance includes the maintenance of reliable networks with the necessary speed, data capacity and bandwidth. If one of these third parties suffers from capacity constraints, our business may be adversely affected. In addition, because we and our merchants generate a disproportionate amount of revenue in the fourth quarter, any disruption in our merchants' ability to process and fulfill customer orders in the fourth quarter could have a disproportionately negative effect on our operating results.

Our growth depends in part on the success of our strategic relationships with third parties.

We anticipate that the growth of our business will continue to depend on third-party relationships, including relationships with our app developers, theme designers, referral sources, resellers, payment processors, providers of online sales channels and other partners. In addition to growing our third-party partner ecosystem, we have entered into agreements with, and intend to pursue additional relationships with, other third parties, such as technology and content providers and implementation consultants. Identifying, negotiating and documenting relationships with third parties requires significant time and resources as does integrating third-party content and technology. Some of the third parties that sell our services have the direct contractual relationships with the merchants, and therefore we risk the loss of such merchants if the third parties fail to perform their obligations. Our agreements with providers of cloud hosting, technology, content and consulting services are typically non-exclusive and do not prohibit such service providers from working with our competitors or from offering competing services. These third-party providers may choose to terminate their relationship with us or to make material changes to their businesses, products or services.

The success of our platform depends, in part, on our ability to integrate third-party apps, themes and other offerings into our third-party ecosystem. Third-party developers may also change the features of their offering of apps and themes or alter the terms governing the use of their offerings in a manner that is adverse to us. If third-party apps and themes change such that we do not or cannot maintain the compatibility of our platform with these apps and themes, or if we fail to ensure there are third-party apps and themes that our merchants desire to add to their shops, demand for our platform could decline. If we are unable to maintain technical inter-operation, our merchants may not be able to effectively integrate our platform with other systems and services they use. We may also be unable to maintain our relationships with certain third-party vendors if we are unable to integrate our platform with their offerings. In addition, third-party developers may refuse to partner with us or limit or restrict our access to their offerings. Such changes could functionally limit or terminate our ability to use these third-party offerings with our platform, which could negatively impact our solution offerings and harm our business. If we fail to integrate our platform with new third- party offerings that our merchants need for their shops, or to adapt to the data transfer requirements of such third-party offerings, we may not be able to offer the functionality that our merchants and their buyers expect, which would negatively impact our offerings and, as a result, harm our business.

Our competitors may be effective in providing incentives to third parties to favor their products or services or to prevent or reduce subscriptions to our platform. In addition, these providers may not perform as expected under our agreements or under their agreements with our merchants, and we or our merchants may in the future have disagreements or disputes with such providers. If we lose access to products or services from a particular supplier, or experience a significant disruption in the supply of products or services from a current supplier, especially a single-source supplier, it could have an adverse effect on our business and operating results.

If we fail to maintain a consistently high level of customer service or if we fail to manage our reputation, our brand, business and financial results may be harmed.

We believe our focus on customer service and support is critical to onboarding new merchants and retaining our existing merchants and growing our business. As a result, we have invested heavily in the quality and training of our support team along with the tools they use to provide this service. If we are unable to maintain a consistently high level of customer service, we may lose existing merchants or fail to increase revenues from existing merchants. In addition, our ability to attract new merchants is highly dependent on our reputation and on positive recommendations from our existing merchants. Any failure to maintain a consistently high level of customer service, or a market perception that we do not maintain high-quality customer service, could adversely affect our reputation and the number of positive merchant referrals that we receive.

We use a limited number of data centers and a cloud service provider to deliver our services. Any disruption of service at these facilities or of the cloud service provider could harm our business.

We currently manage our services and serve all of our merchants from two third-party data center facilities and through a third-party cloud computing service. In 2018, we substantially migrated our computing to run on a cloud computing service. We also have leases at two third-party data center facilities, and have maintained certain functionality in these data centers. We may continue to use these data center facilities in these and other capacities going forward. If, for any reason, we are required to migrate our computing to another cloud service provider, such a transition could incur significant time and expense and our business could be adversely impacted.

Our agreements with our third-party data facility providers terminate on May 31, 2019. The agreements do not provide for early termination without cause. Upon expiration of the current term, both agreements will automatically renew for successive 12-month periods unless appropriate notice is provided. However, when our agreements with the third-party data facilities terminate, the owners of the data facilities have no obligation to re-enter into agreements with us on commercially reasonable terms, or at all. While we own the hardware that is deployed at the data center facilities, we do not control the operation of these facilities. We have experienced, and may in the future experience, failures at the third-party data centers where our hardware is deployed from time to time. Data centers are vulnerable to damage or interruption from human error, intentional bad acts, earthquakes, hurricanes, floods, fires, war, terrorist attacks, power losses, hardware failures, systems failures, telecommunications failures and similar events. Any of these events could result in lengthy interruptions in our services and/or loss of data. Changes in law or regulations applicable to data centers in various jurisdictions could also cause a disruption in service.

Our cloud service provider and the owners and operators of the data center facilities do not guarantee that access to our platform will be uninterrupted or error-free. Interruptions in our services would reduce our revenue, subject us to potential liability and adversely affect our ability to retain our merchants or attract new merchants. The performance, reliability and availability of our platform is critical to our reputation and our ability to attract and retain merchants. Merchants could share information about bad experiences on social media, which could result in damage to our reputation and loss of future sales. The property and business interruption insurance coverage we carry may not be adequate to compensate us fully for losses that may occur.

Mobile devices are increasingly being used to conduct commerce, and if our solutions do not operate as effectively when accessed through these devices, our merchants and their buyers may not be satisfied with our services, which could harm our business.

Commerce transacted over mobile devices continues to grow more rapidly than desktop transactions. In 2018, 62% of the orders on our merchants' shops were from mobile devices. We are dependent on the interoperability of our platform with third-party mobile devices and mobile operating systems as well as web browsers that we do not control. Any changes in such devices, systems or web browsers that degrade the functionality of our platform or give preferential treatment to competitive services could adversely affect usage of our platform. Mobile commerce is a key element in Shopify's strategy and effective mobile functionality is integral to our long-term development and growth strategy. In the event that our merchants and their buyers have difficulty accessing and using our platform on mobile devices, our business and operating results could be adversely affected.

Our business and prospects would be harmed if changes to technologies used in our platform or new versions or upgrades of operating systems and internet browsers adversely impact the process by which merchants and consumers interface with our platform.

We believe the simple and straightforward interface for our platform has helped us to expand and offer our solutions to merchants with limited technical expertise. In the future, providers of internet browsers could introduce new features that would make it difficult for merchants to use our platform. In addition, internet browsers for desktop or mobile devices could introduce new features, change existing browser specifications such that they would be incompatible with our platform, or prevent consumers from accessing our merchants’ shops. Any changes to technologies used in our platform, to existing features that we rely on, or to operating systems or internet browsers that make it difficult for merchants to access our platform or consumers to access our merchants' shops, may make it more difficult for us to maintain or increase our revenues and could adversely impact our business and prospects.

The impact of worldwide economic conditions, including the resulting effect on spending by SMBs or their buyers, may adversely affect our business, operating results and financial condition.

A majority of the merchants that use our platform are SMBs and many of our merchants are in the entrepreneurial stage of their development. Our performance is subject to worldwide economic conditions and their impact on levels of spending by SMBs and their buyers. SMBs and entrepreneurs may be disproportionately affected by economic downturns, especially if they sell discretionary goods. SMBs and entrepreneurs frequently have limited budgets and may choose to allocate their spending to items other than our platform, especially in times of economic uncertainty or recessions.

Economic downturns may also adversely impact retail sales, which could result in merchants who use our platform going out of business or deciding to stop using our services in order to conserve cash. Weakening economic conditions may also adversely affect third parties with whom we have entered into relationships and upon which we depend in order to grow our business. Uncertain and adverse economic conditions may also lead to increased refunds and chargebacks, any of which could adversely affect our business.

We may be subject to claims by third parties of intellectual property infringement.

The software industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patents and other intellectual property rights. Third parties have in the past asserted, and may in the future assert, that our platform, solutions, technology, methods or practices infringe, misappropriate or otherwise violate their intellectual property or other proprietary rights. Such claims may be made by our competitors seeking to obtain a competitive advantage or by other parties. Additionally, non-practicing entities purchasing intellectual property assets for the purpose of making claims of infringement may attempt to extract settlements from us. The risk of claims may increase as the number of solutions that we offer and competitors in our market increases and overlaps occur. In addition, to the extent that we gain greater visibility and market exposure, we face a higher risk of being the subject of intellectual property infringement claims.

Any such claims, regardless of merit, that result in litigation could result in substantial expenses, divert the attention of management, cause significant delays in introducing new or enhanced services or technology, materially disrupt the conduct of our business and have a material and adverse effect on our brand, business, financial condition and results of operations. Although we do not believe that our proprietary technology, processes and methods have been patented by any third party, it is possible that patents have been issued to third parties that cover all or a portion of our business. As a consequence of any patent or other intellectual property claims, we could be required to pay substantial damages, develop non-infringing technology, enter into royalty-bearing licensing agreements, stop selling or marketing some or all of our solutions or re-brand our solutions. We may also be obligated to indemnify our merchants or partners or pay substantial settlement costs, including royalty payments, in connection with any such claim or litigation and to obtain licenses, modify applications or refund fees, which could be costly. If it appears necessary, we may seek to secure license rights to intellectual property that we are alleged to infringe at a significant cost, potentially even if we believe such claims to be without merit. If required licenses cannot be obtained, or if existing licenses are not renewed, litigation could result. Litigation is inherently uncertain and can cause us to expend significant money, time and attention to it, even if we are ultimately successful. Any adverse decision could result in a loss of our proprietary rights, subject us to significant liabilities, require us to seek licenses for alternative technologies from third parties, prevent us from offering all or a portion of our solutions and otherwise negatively affect our business and operating results.

We may be unable to obtain, maintain and protect our intellectual property rights and proprietary information or prevent third parties from making unauthorized use of our technology.

Our trade secrets, trademarks, trade dress, domain names, copyrights and other intellectual property rights are important to our business. We rely on a combination of confidentiality clauses, assignment agreements and license agreements with employees and third parties, trade secrets, copyrights and trademarks to protect our intellectual property and competitive advantage, all of which offer only limited protection. The steps we take to protect our intellectual property require significant resources and may be inadequate. We will not be able to protect our intellectual property if we are unable to enforce our rights or if we do not detect unauthorized use of our intellectual property. We may be required to use significant resources to monitor and protect these rights. Despite our precautions, it may be possible for unauthorized third parties to copy our platform and use information that we regard as proprietary to create services that compete with ours. Some license provisions protecting against unauthorized use, copying, transfer and disclosure of our proprietary information may be unenforceable under the laws of certain jurisdictions and foreign countries. Further, we hold no issued patents and thus would not be entitled to exclude or prevent our competitors from using our proprietary technology, methods and processes to the extent independently developed by our competitors. In addition, we may not be able to acquire or maintain appropriate domain names in all countries in which we do business, or prevent third parties from acquiring domain names that are similar to, infringe upon, or diminish the value of our trademarks and other proprietary rights. Furthermore, regulations governing domain names may not protect our trademarks or similar proprietary rights.

We enter into confidentiality and intellectual property agreements with our employees and consultants and enter into confidentiality agreements with the parties with whom we have strategic relationships and business alliances. No assurance can be given that these agreements will be effective in securing ownership of our intellectual property or controlling access to our proprietary information and trade secrets. The confidentiality agreements on which we rely to protect certain technologies may be breached, may not be adequate to protect our confidential information, trade secrets and proprietary technologies and may not provide an adequate remedy in the event of unauthorized use or disclosure of our confidential information, trade secrets or proprietary technology. Further, these agreements do not prevent our competitors or others from independently developing software that is substantially equivalent or superior to our software. In addition, others may independently discover our trade secrets and confidential information, and in such cases, we likely would not be able to assert any trade secret rights against such parties. Additionally, we may from time to time be subject to opposition or similar proceedings with respect to applications for registrations of our intellectual property, including our trademarks. While we aim to acquire adequate protection of our brand through trademark registrations in key markets, occasionally third parties may have already registered or otherwise acquired rights to identical or similar marks for services that also address our market. We rely on our brand and trademarks to identify our platform and to differentiate our platform and services from those of our competitors, and if we are unable to adequately protect our trademarks third parties may use our brand names or trademarks similar to ours in a manner that may cause confusion in the market, which could decrease the value of our brand and adversely affect our business and competitive advantages.

Policing unauthorized use of our intellectual property and misappropriation of our technology and trade secrets is difficult and we may not always be aware of such unauthorized use or misappropriation. Despite our efforts to protect our intellectual property rights, unauthorized third parties may attempt to use, copy or otherwise obtain and market or distribute our intellectual property rights or technology or otherwise develop services with the same or similar functionality as our platform. If our competitors infringe, misappropriate or otherwise misuse our intellectual property rights and we are not adequately protected, or if our competitors are able to develop a platform with the same or similar functionality as ours without infringing our intellectual property, our competitive advantage and results of operations could be harmed. Litigation brought to protect and enforce our intellectual property rights could be costly, time consuming and distracting to management and could result in the impairment or loss of portions of our intellectual property. As a result, we may be aware of infringement by our competitors but may choose not to bring litigation to enforce our intellectual property rights due to the cost, time and distraction of bringing such litigation. Furthermore, if we do decide to bring litigation, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims and countersuits challenging or opposing our right to use and otherwise exploit particular intellectual property, services and technology or the enforceability of our intellectual property rights. Our inability to protect our proprietary technology against unauthorized copying or use, as well as any costly litigation or diversion of our management's attention and resources, could delay further sales or the implementation of our solutions, impair the functionality of our platform, prevent or delay introductions of new or enhanced solutions, result in our substituting inferior or more costly technologies into our platform or injure our reputation. Furthermore, many of our current and potential competitors have the ability to dedicate substantially greater resources to developing and protecting their technology or intellectual property rights than we do.

Our use of open source software could negatively affect our ability to sell our solutions and subject us to possible litigation.

Our solutions incorporate and are dependent to a significant extent on the use and development of open source software and we intend to continue our use and development of open source software in the future. Such open source software is generally licensed by its authors or other third parties under open source licenses and is typically freely accessible, usable and modifiable. Pursuant to such open source licenses, we may be subject to certain conditions, including requirements that we offer our proprietary software that incorporates the open source software for no cost, that we make available source code for modifications or derivative works we create based upon, incorporating or using the open source software and that we license such modifications or derivative works under the terms of the particular open source license. If an author or other third party that uses or distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages, enjoined from the sale of our solutions that contained or are dependent upon the open source software, and required to comply with the foregoing conditions, which could disrupt the distribution and sale of some of our solutions. Litigation could be costly for us to defend, have a negative effect on our operating results and financial condition or require us to devote additional research and development resources to change our platform. The terms of many open source licenses to which we are subject have not been interpreted by U.S. or foreign courts. As there is little or no legal precedent governing the interpretation of many of the terms of certain of these licenses, the potential impact of these terms on our business is uncertain and may result in unanticipated obligations regarding our solutions and technologies. It is our view that we do not distribute our core software offering, since no installation of our software is necessary and our platform is accessible solely through the cloud. Nevertheless, this position could be challenged. Any requirement to disclose our proprietary source code, termination of open source license rights or payments of damages for breach of contract could be harmful to our business, results of operations or financial condition, and could help our competitors develop products and services that are similar to or better than ours.

In addition to risks related to license requirements, usage of open source software can lead to greater risks than the use of third-party commercial software, as open source licensors generally do not provide warranties, controls on the origin or development of the software, or remedies against the licensors. Many of the risks associated with usage of open source software cannot be eliminated and could adversely affect our business.

Although we believe that we have complied with our obligations under the various applicable licenses for open source software, it is possible that we may not be aware of all instances where open source software has been incorporated into our proprietary software or used in connection with our solutions or our corresponding obligations under open source licenses. We do not have robust open source software usage policies or monitoring procedures in place. We rely on multiple software programmers to design our proprietary software and we cannot be certain that our programmers have not incorporated open source software into our proprietary software that we intend to maintain as confidential or that they will not do so in the future. To the extent that we are required to disclose the source code of certain of our proprietary software developments to third parties, including our competitors, in order to comply with applicable open source license terms, such disclosure could harm our intellectual property position, competitive advantage, results of operations and financial condition. In addition, to the extent that we have failed to comply with our obligations under particular licenses for open source software, we may lose the right to continue to use and exploit such open source software in connection with our operations and solutions, which could disrupt and adversely affect our business.

We rely on search engines and social networking sites to attract a meaningful portion of our merchants. If we are not able to generate traffic to our website through search engines and social networking sites, our ability to attract new merchants may be impaired. In addition, if our merchants are not able to generate traffic to their shops through search engines and social networking sites, their ability to attract consumers may be impaired.

Many of our merchants locate our website through internet search engines, such as Google, and advertisements on social networking sites, such as Facebook. The prominence of our website in response to internet searches is a critical factor in attracting potential merchants to our platform. If we are listed less prominently or fail to appear in search results for any reason, visits to our website could decline significantly, and we may not be able to replace this traffic.

Similarly, many consumers locate our merchants' shops through internet search engines and advertisements on social networking sites. If our merchants' shops are listed less prominently or fail to appear in search results for any reason, visits to our merchants' shops could decline significantly. As a result, our merchants' businesses may suffer, which would affect the GMV that they process through our platform and could affect the ability of such merchants to pay for our solutions.

Search engines revise their algorithms from time to time in an attempt to optimize their search results. If search engines modify their algorithms, our website and our merchants' shops may appear less prominently or not at all in search results, which could result in reduced traffic to our website and to our merchants' shops.

Additionally, if the price of marketing our solutions over search engines or social networking sites increases, we may incur additional marketing expenses or may be required to allocate a larger portion of our marketing spend to search engine marketing and our business and operating results could be adversely affected. Furthermore, competitors may in the future bid on the search terms that we use to drive traffic to our website. Such actions could increase our marketing costs and result in decreased traffic to our website. In addition, search engines or social networking sites may change their advertising policies from time to time. If any change to these policies delays or prevents us from advertising through these channels, it could result in reduced traffic to our website and sales of our solutions. As well, new search engines or social networking sites may develop, particularly in specific jurisdictions, that reduce traffic on existing search engines and social networking sites. and if we are not able to achieve awareness through advertising or otherwise, we may not achieve significant traffic to our website through these new platforms. If we are unable to continue to successfully promote and maintain our websites, or if we incur excessive expenses to do so, our business and operating results could be adversely affected.

Our brand is integral to our success. If we fail to effectively maintain, promote and enhance our brand, our business and competitive advantage may be harmed.

We believe that maintaining, promoting and enhancing the Shopify brand is critical to expanding our business. Maintaining and enhancing our brand will depend largely on our ability to continue to provide high-quality, well-designed, useful, reliable and innovative solutions, which we may not do successfully.

Errors, defects, disruptions or other performance problems with our platform, including with third-party apps, may harm our reputation and brand. We may introduce new solutions or terms of service that our merchants and their buyers do not like, which may negatively affect our brand. Additionally, if our merchants or their buyers have a negative experience using our solutions or third-party solutions integrated with Shopify, such an experience may affect our brand, especially as we continue attract larger merchants to our platform. Our Shopify Experts directory enables independent designers, developers and marketers to offer their services to merchants who engage them directly. Our reputation may be harmed if any of the services provided by these third parties does not meet our merchants' expectations.

We receive media coverage globally. Any unfavorable media coverage or negative publicity about our industry or our company, for example, the quality and reliability of our platform, our privacy and security practices, our product changes, litigation, or regulatory activity, or regarding the actions of our partners or our merchants, could seriously harm our reputation. Such negative publicity could also adversely affect the size, demographics, engagement, and loyalty of our merchants and result in decreased revenue, which could seriously harm our business. Critics of our industry, and others who may want to pursue an agenda have in the past and may in the future utilize the internet, the press and other means to publish criticisms of our industry, our company and our competitors, or make allegations regarding our business and operations, or the business and operations of our competitors. We or others in our industry may receive similar negative publicity or allegations in the future, and it could be costly, time consuming, distracting to management, cause fluctuations in the market price of our Class A subordinate voting shares, and harm our business and reputation.

We believe that the importance of brand recognition will increase as competition in our market increases. In addition to our ability to provide reliable and useful solutions at competitive prices, successful promotion of our brand will depend on the effectiveness of our marketing efforts. While we market our platform primarily through advertisements on search engines and social networking and media sites, and paid banner advertisements on other websites, our platform is also marketed through our partner and reseller channels and through a number of free traffic sources, including customer referrals, word-of-mouth and search engines. We also hire sales personnel to market Shopify Plus, a subscription plan for merchants with higher volume sales and additional functionality requirements, introducing additional costs with no assurance of success. Our efforts to market our brand have involved significant expenses, which we intend to increase. Our marketing spend may not yield increased revenue, and even if it does, any increased revenue may not offset the expenses we incur in building and maintaining our brand.

We are dependent on the continued services and performance of our senior management and other key employees, the loss of any of whom could adversely affect our business, operating results and financial condition.

Our future performance depends on the continued services and contributions of our senior management, including our Chief Executive Officer, Tobias Lütke, and other key employees to execute on our business plan and to identify and pursue new opportunities and product innovations. The failure to properly manage succession plans and/or the loss of services of senior management or other key employees could significantly delay or prevent the achievement of our strategic objectives. From time to time, there may be changes in our senior management team resulting from the hiring or departure of executives, which could disrupt our business. We do not maintain key person life insurance policies on any of our employees. The loss of the services of one or more of our senior management or other key employees for any reason could adversely affect our business, financial condition and operating results and require significant amounts of time, training and resources to find suitable replacements and integrate them within our business, and could affect our corporate culture.

Activities of merchants or partners or the content of our merchants' shops could damage our brand, subject us to liability and harm our business and financial results.

Our terms of service and acceptable use policy prohibit our merchants and our partners from using our platform to engage in illegal or otherwise prohibited activities and our terms of service and acceptable use policy permit us to terminate a merchant's shop or a partner's account if we become aware of such use. Merchants or partners may nonetheless engage in prohibited or illegal activities or upload store content in violation of applicable laws, which could subject us to liability. Furthermore, our brand may be negatively impacted by the actions of merchants or partners that are deemed to be hostile, offensive, inappropriate or illegal. We do not proactively monitor or review the appropriateness of the content of our merchants' shops and we do not have control over merchant activities. The safeguards we have in place may not be sufficient for us to avoid liability or avoid harm to our brand, especially if such hostile, offensive, inappropriate or illegal use is high profile, which could adversely affect our business and financial results. In addition, due to our international expansion, we may be subject to international actions alleging that merchants' store content violate laws in foreign jurisdictions.

We have in the past made and in the future may make acquisitions and investments, which could divert management's attention, result in operating difficulties and dilution to our shareholders and otherwise disrupt our operations and adversely affect our business, operating results or financial position.

From time to time, we evaluate potential strategic acquisition or investment opportunities. Any transactions that we enter into could be material to our financial condition and results of operations. The process of acquiring and integrating another company or technology could create unforeseen operating difficulties and expenditures. Acquisitions and investments involve a number of risks, such as:

- diversion of management time and focus from operating our business;
- use of resources that are needed in other areas of our business;
- in the case of an acquisition, implementation or remediation of controls, procedures and policies of the acquired company;
- in the case of an acquisition, difficulty integrating the accounting systems and operations of the acquired company, including potential risks to our corporate culture;
- in the case of an acquisition, coordination of product, engineering and selling and marketing functions, including difficulties and additional expenses associated with supporting legacy services

and products and hosting infrastructure of the acquired company and difficulty converting the customers of the acquired company onto our platform and contract terms, including disparities in the revenues, licensing, support or professional services model of the acquired company;

- in the case of an acquisition, retention and integration of employees from the acquired company;
- unforeseen costs or liabilities;
- adverse effects to our existing business relationships with partners and merchants as a result of the acquisition or investment;
- the possibility of adverse tax consequences;
- litigation or other claims arising in connection with the acquired company or investment; and
- in the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political and regulatory risks associated with specific countries.

In addition, a significant portion of the purchase price of companies we acquire may be allocated to acquired goodwill and other intangible assets, which must be assessed for impairment at least annually. In the future, if our acquisitions do not yield expected returns, we may be required to take charges to our operating results based on this impairment assessment process, which could adversely affect our results of operations.

Acquisitions and investments may also result in dilutive issuances of equity securities, which could adversely affect our share price, or result in issuances of securities with superior rights and preferences to the Class A subordinate voting shares or the incurrence of debt with restrictive covenants that limit our future uses of capital in pursuit of business opportunities.

We may not be able to identify acquisition or investment opportunities that meet our strategic objectives, or to the extent such opportunities are identified, we may not be able to negotiate terms with respect to the acquisition or investment that are acceptable to us. At this time we have made no commitments or agreements with respect to any such material transactions.

Our operating results are subject to seasonal fluctuations.

Our merchant solutions revenues are directionally correlated with the level of GMV that merchants facilitated through our platform. Our merchants typically process additional GMV during the fourth quarter holiday season. As a result, we have historically generated higher merchant solutions revenues in our fourth quarter than in other quarters. While we believe that this seasonality has affected and will continue to affect our quarterly results, our rapid growth has largely masked seasonal trends to date. As a result of the continued growth of our merchant solutions offerings, we believe that our business may become more seasonal in the future and that historical patterns in our business may not be a reliable indicator of our future performance. Fluctuations in quarterly results may materially and adversely affect the predictability of our business and the price of our Class A subordinate voting shares.

We rely on computer hardware, purchased or leased, and software licensed from and services rendered by third parties in order to provide our solutions and run our business, sometimes by a single-source supplier.

We rely on computer hardware, purchased or leased, and software licensed from and services rendered by third parties in order to provide our solutions and run our business, sometimes by a single-source supplier. Third-party hardware, software and services may not continue to be available on commercially reasonable terms, or at all. Any loss of the right to use or any failures of third-party hardware, software or services could result in delays in our ability to provide our solutions or run our business until equivalent hardware, software or services are developed by us or, if available, identified, obtained and integrated, which could be costly and time-consuming and may not result in an equivalent solution, any of which could cause an adverse effect on our business and operating results. Further, merchants could assert claims against us in connection with such service disruption or cease conducting business with us altogether. Even if not successful, a claim brought against us by any of our merchants would likely be time-consuming and costly to defend and could seriously damage our reputation and brand, making it harder for us to sell our solutions.

Shopify Capital is subject to additional risks relating to the availability of capital to fund merchants, the ability of our merchants to generate sales to remit receivables, general macroeconomic conditions and the risk of fraud.

The merchant cash advance ("MCA") and loan programs offered by Shopify Capital are subject to additional risks. If we cannot source capital to fund MCAs or loans for our merchants, we might have to reduce the availability of this service, or cease offering it altogether. A decline in macroeconomic conditions could lead to a decrease in the number of merchants eligible for an MCA or loan, and/or increase the risk of fraud or non-payment. If more of our merchants cease operations, experience a decline in their sales, or engage in fraudulent behavior, it would make it more difficult for us to obtain the receivables we have purchased via MCAs or to obtain repayment of loans we have made. In addition, if we fail to correctly predict likely remittances for MCAs or the likelihood of timely repayment of loans, our business may be materially and adversely affected. If we are unable to properly manage the risks of offering MCAs or loans to merchants our business may be materially and adversely affected. If we are unable to maintain third party insurance our exposure to losses increases, which could have an adverse impact on our results. If laws and regulations change subjecting MCAs or loans to licensing or other issuing requirements, our costs associated with Shopify Capital may increase or we may decide to discontinue the program altogether, and our business and results of operations would be negatively impacted.

We intend to continue to explore other products, models and structures for Shopify Capital. Some of those models or structures may require, or be deemed to require, additional procedures, partnerships, licenses, regulatory approvals or capabilities. Should we fail to expand and evolve Shopify Capital in this manner, or should these new products, models or structures, or new regulations or interpretations of existing regulations, impose requirements on us that are impractical or that we cannot satisfy, the future growth and success of Shopify Capital may be materially and adversely affected.

Our pricing decisions may adversely affect our ability to attract new merchants and retain existing merchants.

We have limited experience determining the optimal prices for our solutions. We have changed our pricing model from time to time and expect to do so in the future. However, given our limited experience with selling new solutions, it may turn out that the new pricing model, or the pricing for any of our other solutions, is not optimal, which may result in our solutions not being profitable or not gaining market share. Therefore, we expect to change our pricing models again in the future. As competitors introduce new solutions that compete with ours, especially in the payments space where we face significant competition, we may be unable to attract new merchants at the same price or based on the same pricing models as we have used historically. Pricing decisions may also impact the mix of adoption among our plans and negatively impact our overall revenue. Moreover, SMBs, which comprise the majority of merchants using our platform, may be quite sensitive to price increases or prices offered by competitors. As a result, in the future we may be required to reduce our prices, which could adversely affect our revenue, gross profit, profitability, financial position and cash flows.

Provisions of our financial instruments may restrict our ability to pursue our business strategies.

Any debt instruments we may enter into in the future may require us, to comply with various covenants that limit our ability to, among other things:

- dispose of assets;
- complete mergers or acquisitions;
- incur indebtedness;
- encumber assets;
- pay dividends or make other distributions to holders of our shares;
- make specified investments;
- change certain key management personnel;
- engage in any business other than the businesses we currently engage in; and
- engage in transactions with our affiliates.

These restrictions could inhibit our ability to pursue our business strategies. If we default under a credit facility, and such event of default is not cured or waived, the lenders could terminate commitments to lend and cause all amounts outstanding with respect to the debt to be due and payable immediately, which in turn could result in cross-defaults under our other debt instruments. Our assets and cash flow may not be sufficient to fully repay borrowings under all of our outstanding debt instruments if some or all of these instruments are accelerated upon a default.

We may also incur additional indebtedness in the future. The instruments governing such indebtedness could contain provisions that are as, or more, restrictive than our existing debt instruments. If we are unable to repay, refinance or restructure our indebtedness when payment is due, the lenders could proceed against the collateral granted to them to secure such indebtedness, as applicable, or force us into bankruptcy or liquidation.

We may need to raise additional funds to pursue our growth strategy or continue our operations, and we may be unable to raise capital when needed or on acceptable terms.

From time to time, we may seek additional equity or debt financing to fund our growth, enhance our platform, respond to competitive pressures or make acquisitions or other investments. Our business plans may change, general economic, financial or political conditions in our markets may deteriorate or other circumstances may arise, in each case that have a material adverse effect on our cash flows and the anticipated cash needs of our business. Any of these events or circumstances could result in significant additional funding needs, requiring us to raise additional capital. We cannot predict the timing or amount of any such capital requirements at this time. If financing is not available on satisfactory terms, or at all, we may be unable to expand our business at the rate desired and our results of operations may suffer. Financing through issuances of equity securities would be dilutive to holders of our shares.

Unanticipated changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns could adversely affect our operating results and financial condition.

With sales in various countries, we are subject to taxation in several jurisdictions around the world with increasingly complex tax laws, the application of which can be uncertain. The amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax principles, including increased tax rates, new tax laws or revised interpretations of existing tax laws and precedents, which could have an adverse impact on our liquidity and results of operations.

In addition, the authorities in several jurisdictions could review our tax returns and impose additional tax, interest and penalties, which could have an impact on us and on our results of operations. We previously have participated in government programs with both the Canadian federal government and the Government of Ontario that provide investment tax credits based upon qualifying research and development expenditures. If Canadian taxation authorities successfully challenge such expenses or the correctness of such income tax credits claimed, our historical operating results could be adversely affected. As a public company, we are no longer eligible for refundable tax credits under the Canadian federal Scientific Research and Experimental Development Program, or SR&ED credits. However, we are still eligible for non-refundable SR&ED credits under this program, which are eligible to reduce future income taxes payable.

Our future effective tax rates could be subject to volatility or adversely affected by a number of factors, including:

- changes in the valuation of our deferred tax assets and liabilities;
- expected timing and amount of the release of any tax valuation allowances;
- tax effects of stock-based compensation;
- costs related to intercompany restructurings;
- changes in tax laws, regulations or interpretations thereof; or
- future earnings being lower than anticipated in countries where we have lower statutory tax rates and higher than anticipated earnings in countries where we have higher statutory tax rates.

We currently conduct activities in the United States and other jurisdictions through our subsidiaries pursuant to transfer pricing arrangements and may in the future conduct operations in other jurisdictions pursuant to similar arrangements. If two or more affiliated companies are located in different countries, the tax laws or regulations of each country generally will require that transfer prices be the same as those between unrelated companies dealing at arms’ length. While we believe that we operate in compliance with applicable transfer pricing laws and intend to continue to do so, our transfer pricing procedures are not binding on applicable tax authorities. If tax authorities in any of these countries were to successfully challenge our transfer prices as not reflecting arm’s length transactions, they could require us to adjust our transfer prices and thereby reallocate our income to reflect these revised transfer prices, which could result in a higher tax liability to us.

New tax laws could be enacted or existing laws could be applied to us or our merchants, which could increase the costs of our solutions and adversely impact our business.

The application of federal, state, provincial, local and foreign tax laws to solutions provided over the internet continues to evolve. New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, possibly with retroactive effect, and could be applied solely or disproportionately to solutions provided over the internet. These enactments could adversely affect our sales activity due to the inherent cost increase the taxes would represent, and could ultimately result in a negative impact on our results of operations and cash flows.

U.S. federal, state and local tax authorities and other foreign tax authorities may seek to assess state and local business taxes and sales and use taxes. If we are required to collect sales and use taxes in additional jurisdictions, we might be subject to tax liability for past sales.

There is a risk that U.S. and other foreign jurisdictions could assert that we are liable for U.S. federal, state and local or other foreign business activity taxes, which are levied upon income or gross receipts, or for the collection of U.S. local sales and use taxes. This risk exists regardless of whether we are subject to U.S. federal, state, or city income tax or other foreign taxes. U.S. states are becoming increasingly active in asserting nexus for business activity tax purposes and imposing sales and use taxes on products and services provided over the internet. We may be subject to U.S. state and local business activity taxes if a state tax authority asserts that our activities or the activities of our non-U.S. subsidiaries are sufficient to establish nexus. We could also be liable for the collection of U.S. state and local sales and use taxes if a state tax authority asserts that distribution of our solutions over the internet is subject to sales and use taxes. Each state has different rules and regulations governing sales and use taxes, and these rules and regulations are subject to varying interpretations that change over time. We review U.S. and other foreign rules and regulations periodically and, when we believe we are subject to sales and use taxes in a particular state or jurisdiction, voluntarily engage state and city tax authorities in order to determine how to comply with their rules and regulations. If a state tax authority asserts that distribution of our solutions is subject to such sales and use taxes, the additional cost may decrease the likelihood that such merchants would purchase our solutions or continue to renew their subscriptions. In addition, in June 2018, the U.S. Supreme Court ruled in South Dakota v. Wayfair, Inc. that U.S. states may collect internet sales tax on online purchases made outside of the state, which could adversely affect buyer behaviour, adversely affect some of our merchants and indirectly harm our business.

A successful assertion by one or more jurisdictions requiring us to collect sales or other taxes on subscription service revenue could result in substantial tax liabilities for past transactions and otherwise harm our business. We cannot assure you that we will not be subject to sales and use taxes or related penalties for past sales in jurisdictions where we currently believe no such taxes are required. New obligations to collect or pay taxes of any kind could increase our cost of doing business.

We may not be able to utilize a significant portion of our non-capital loss carryforwards, net operating loss carryforwards and other tax credits, which could adversely affect our profitability.

As of December 31, 2018, we had Canadian non-capital loss carryforwards, and non-refundable Canadian SR&ED credits due to current and prior year SR&ED claims. These non-capital loss carryforwards and non-refundable tax credits could expire unused and be unavailable to offset future income tax liabilities, which could adversely affect our profitability.

Additionally, as of December 31, 2018, we had U.S. state net operating loss carryforwards, and other operating loss carryforwards in other jurisdictions, due to prior period losses. These net operating loss carryforwards could expire unused and be unavailable to offset future income tax liabilities, which could adversely affect our profitability.

We are dependent upon consumers' and merchants' continued and unimpeded access to the internet, and upon their willingness to use the internet for commerce.

Our success depends upon the general public's ability to access the internet and its continued willingness to use the internet as a means to pay for purchases, communicate, access social media, research and conduct commercial transactions, including through mobile devices. The adoption of any laws or regulations that adversely affect the growth, popularity or use of the internet, including changes to laws or regulations impacting internet neutrality, could decrease the demand for our products, increase our operating costs, or otherwise adversely affect our business. Given uncertainty around these rules, we could experience discriminatory or anti-competitive practices that could impede both our and our merchants' growth, increase our costs or adversely affect our business. If consumers or merchants become unable, unwilling or less willing to use the internet for commerce for any reason, including lack of access to high-speed communications equipment, congestion of traffic on the internet, internet outages or delays, disruptions or other damage to merchants' and consumers' computers, increases in the cost of accessing the internet and security and privacy risks or the perception of such risks, our business could be adversely affected.

Risks Related to Ownership of our Shares

Our dual class structure has the effect of concentrating voting control and the ability to influence corporate matters with those shareholders who held our shares prior to our initial public offering, including our executive officers, employees and directors and their affiliates.

Our Class B multiple voting shares have 10 votes per share and our Class A subordinate voting shares have one vote per share. As of February 7, 2019, shareholders who hold Class B multiple voting shares, including our executive officers, directors and their affiliates, together hold approximately 53.77% of the voting power of our outstanding voting shares and therefore have significant influence over our management and affairs and over all matters requiring shareholder approval, including the election of directors and significant corporate transactions.

In addition, because of the 10-to-1 voting ratio between our Class B multiple voting shares and Class A subordinate voting shares, the holders of our Class B multiple voting shares collectively continue to control a majority of the combined voting power of our voting shares even where the Class B multiple voting shares represent a substantially reduced percentage of our total outstanding shares. The concentrated voting control of holders of our Class B multiple voting shares limits the ability of our Class A subordinate voting shareholders to influence corporate matters for the foreseeable future, including the election of directors as well as with respect to decisions regarding amendment of our share capital, creating and issuing additional classes of shares, making significant acquisitions, selling significant assets or parts of our business, merging with other companies and undertaking other significant transactions. As a result, holders of Class B multiple voting shares have the ability to influence many matters affecting us and actions may be taken that our Class A subordinate voting shareholders may not view as beneficial. The market price of our Class A subordinate voting shares could be adversely affected due to the significant influence and voting power of the holders of Class B multiple voting shares. Additionally, the significant voting interest of holders of Class B multiple voting shares may discourage transactions involving a change of control, including transactions in which an investor, as a holder of the Class A subordinate voting shares, might otherwise receive a premium for the Class A subordinate voting shares over the then-current market price, or discourage competing proposals if a going private transaction is proposed by one or more holders of Class B multiple voting shares.

Future transfers by holders of Class B multiple voting shares will generally result in those shares converting to Class A subordinate voting shares, which will have the effect, over time, of increasing the relative voting power of those holders of Class B multiple voting shares who retain their shares. If, for example, our Chief Executive Officer, Tobias Lütke, who as of February 7, 2019 holds approximately 63.98% of our outstanding Class B multiple voting shares, retains a significant portion of his holdings of Class B multiple voting shares for an extended period of time, he could, in the future, control a significant percentage of the combined voting power of our Class A subordinate voting shares and Class B multiple voting shares. Each of our directors and officers owes a fiduciary duty to Shopify and must act honestly and in good faith with a view to the best interests of Shopify. However, any director and/or officer that is a shareholder, even a controlling shareholder, is entitled to vote his or her shares in his or her own interests, which may not always be in the interests of our shareholders generally.

Our restated articles of incorporation amend certain default rights provided for under the CBCA for holders of Class B multiple voting shares and Class A subordinate voting shares to vote separately as a class for certain types of amendments to our restated articles of incorporation. Specifically, neither the holders of the Class B multiple voting shares nor Class A subordinate voting shares shall be entitled to vote separately as a class upon a proposal to amend our restated articles of incorporation to (1) increase or decrease any maximum number of authorized shares of such class, or increase any maximum number of authorized shares of a class having rights or privileges equal or superior to the shares of such class; or (2) create a new class of shares equal or superior to the shares of such class, which rights are otherwise provided for in paragraphs (a) and (e) of subsection 176(1) of the CBCA. Pursuant to our restated articles of incorporation, neither holders of our Class A subordinate voting shares nor holders of our Class B multiple voting shares are entitled to vote separately as a class on a proposal to amend our restated articles of incorporation to effect an exchange, reclassification or cancellation of all or part of the shares of such class pursuant to Section 176(1)(b) of the CBCA unless such exchange, reclassification or cancellation: (a) affects only the holders of that class; or (b) affects the holders of Class A subordinate voting shares and Class B multiple voting shares differently, on a per share basis, and such holders are not already otherwise entitled to vote separately as a class under applicable law or our restated articles of incorporation in respect of such exchange, reclassification or cancellation.

Pursuant to our restated articles of incorporation, holders of Class A subordinate voting shares and Class B multiple voting shares are treated equally and identically, on a per share basis, in certain change of control transactions that require approval of our shareholders under the CBCA, unless different treatment of the shares of each such class is approved by a majority of the votes cast by the holders of our Class A subordinate voting shares and Class B multiple voting shares, each voting separately as a class.

The market price of our Class A subordinate voting shares may be volatile.

The market price of our Class A subordinate voting shares has fluctuated in the past and we expect it to fluctuate in the future, and it may decline. For example, from January 1, 2018 to February 7, 2019, our share price on the New York Stock Exchange, or NYSE, has ranged from $101.02 to $176.88. We cannot assure you that an active trading market for our Class A subordinate voting shares will be sustained, and we therefore cannot assure you that you will be able to sell your Class A subordinate voting shares when you would like to do so, or that you will obtain your desired price for your shares, and you could lose all or part of your investment. Some of the factors that may cause the market price of our Class A subordinate voting shares to fluctuate include:

- significant volatility in the market price and trading volume of comparable companies;
- actual or anticipated changes or fluctuations in our operating results or in the expectations of market analysts;
- adverse market reaction to any indebtedness we may incur or securities we may issue in the future;
- short sales, hedging and other derivative transactions in our shares;
- announcements of technological innovations, new products, strategic alliances or significant agreements by us or by our competitors;
- changes in the prices of our solutions or the prices of our competitors' solutions;
- litigation or regulatory action against us;
- breaches of security or privacy, and the costs associated with any such breaches and remediation;
- investors' general perception of us and the public's reaction to our press releases, our other public announcements and our filings with the SEC and Canadian securities regulators;
- fluctuations in quarterly results;

- publication of research reports or news stories about us, our competitors or our industry, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in general political, economic, industry and market conditions and trends;
- sales of our Class A subordinate voting shares and Class B multiple voting shares by our directors, executive officers and existing shareholders;
- recruitment or departure of key personnel; and
- the other risk factors described in this section of our AIF.

In addition, the stock markets have historically experienced substantial price and volume fluctuations, particularly in the case of shares of technology companies, and such fluctuations and other broad market and industry factors may harm the market price of our Class A subordinate voting shares. Hence, the price of our Class A subordinate voting shares could fluctuate based upon factors that have little or nothing to do with us, and these fluctuations could materially reduce the share price of our Class A subordinate voting shares regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has been instituted against that company. If we were involved in any similar litigation, we could incur substantial costs, our management's attention and resources could be diverted and it could harm our business, operating results and financial condition.

Sales of substantial amounts of our Class A subordinate voting shares in the public market, or the perception that these sales may occur, could cause the market price of our shares to decline.

Certain of our shareholders have certain rights to require us to file registration statements in the United States or prospectuses in Canada covering their shares or to include their shares in registration statements or prospectuses that we may file for ourselves or on behalf of other shareholders.

Further, we cannot predict the size of future issuances of our Class A subordinate voting shares or the effect, if any, that future issuances and sales of our Class A subordinate voting shares will have on the market price of our Class A subordinate voting shares. Sales of substantial amounts of our shares, or the perception that such sales could occur, may adversely affect prevailing market prices for our Class A subordinate voting shares.

Risks associated with our internal controls over financial reporting.

Any failure of our internal controls could have an adverse effect on our stated results of operations and harm our reputation. As a result, we may experience higher than anticipated operating expenses, as well as higher independent auditor fees during and after the implementation of these changes. If we are unable to implement any of the required changes to our internal control over financial reporting effectively or efficiently or are required to do so earlier than anticipated, it could adversely affect our operations, financial reporting and results of operations. If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be adversely impacted.

Because we do not expect to pay any dividends on our Class A subordinate voting shares for the foreseeable future, investors may never receive a return on their investment.

We have never declared or paid any dividends on our securities. We do not have any present intention to pay cash dividends on our Class A subordinate voting shares and we do not anticipate paying any cash dividends on our Class A subordinate voting shares in the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Any future determination as to the declaration and payment of dividends, if any, will be at the discretion of our board of directors and will depend on our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

As a foreign private issuer, we are subject to different U.S. securities laws and rules than a domestic U.S. issuer, which may limit the information publicly available to our shareholders.

We are a "foreign private issuer," as such term is defined in Rule 405 under the Securities Act, and are not subject to the same requirements that are imposed upon U.S. domestic issuers by the SEC. Under the Exchange Act, we are subject to reporting obligations that, in certain respects, are less detailed and less frequent than those of U.S. domestic reporting companies. As a result, we do not file the same reports that a U.S. domestic issuer would file with the SEC, although we are required to file or furnish to the SEC the continuous disclosure documents that we are required to file in Canada under Canadian securities laws. In addition, our officers, directors, and principal shareholders are exempt from the reporting and "short swing" profit recovery provisions of Section 16 of the Exchange Act. Therefore, our shareholders may not know on as timely a basis when our officers, directors and principal shareholders purchase or sell shares, as the reporting deadlines under the corresponding Canadian insider reporting requirements are longer.

As a foreign private issuer, we are exempt from the rules and regulations under the Exchange Act related to the furnishing and content of proxy statements. We are also exempt from Regulation FD, which prohibits issuers from making selective disclosures of material non-public information. While we will comply with the corresponding requirements relating to proxy statements and disclosure of material non-public information under Canadian securities laws, these requirements differ from those under the Exchange Act and Regulation FD and shareholders should not expect to receive the same information at the same time as such information is provided by U.S. domestic companies. In addition, we are not required under the Exchange Act to file annual and quarterly reports with the SEC as promptly as U.S. domestic companies whose securities are registered under the Exchange Act.

In addition, as a foreign private issuer, we have the option to follow certain Canadian corporate governance practices, except to the extent that such laws would be contrary to U.S. securities laws, and provided that we disclose the requirements we are not following and describe the Canadian practices we follow instead. We currently rely on this exemption with respect to requirements regarding the quorum for any meeting of our shareholders. We may in the future elect to follow home country practices in Canada with regard to other matters. As a result, our shareholders may not have the same protections afforded to shareholders of U.S. domestic companies that are subject to all corporate governance requirements.

We may lose foreign private issuer status in the future, which could result in significant additional costs and expenses to us.

We may in the future lose our foreign private issuer status if a majority of our shares are held in the United States and we fail to meet the additional requirements necessary to avoid loss of foreign private issuer status, such as if: (1) a majority of our directors or executive officers are U.S. citizens or residents; (2) a majority of our assets are located in the United States; or (3) our business is administered principally in the United States. Although we have elected to comply with certain U.S. regulatory provisions, our loss of foreign private issuer status would make such compliance mandatory. The regulatory and compliance costs to us under securities laws as a U.S. domestic issuer will be significantly more than the costs incurred as a Canadian foreign private issuer. If we were not a foreign private issuer, we would not be eligible to use foreign issuer forms and would be required to file periodic and current reports and registration statements on U.S. domestic issuer forms with the SEC, which are generally more detailed and extensive than the forms available to a foreign private issuer. In addition, we may lose our ability to rely upon exemptions from certain corporate governance requirements on U.S. stock exchanges that are available to foreign private issuers.

Provisions of Canadian law may delay, prevent or make undesirable an acquisition of all or a significant portion of our shares or assets.

The *Investment Canada Act* (Canada) subjects an acquisition of control of us by a non-Canadian to government review if the value of our assets as calculated pursuant to the legislation exceeds a threshold amount. A reviewable acquisition may not proceed unless the relevant Minister is satisfied that the investment is likely to be of net benefit to Canada. This could prevent or delay a change of control and may eliminate or limit strategic opportunities for shareholders to sell their Class A subordinate voting shares.

It may be difficult to enforce civil liabilities in Canada under U.S. securities laws.

We were incorporated in Canada, and our corporate headquarters are located in Canada. A majority of our directors and executive officers and certain of the experts named in our Annual Report reside or are based principally in Canada and the majority of our assets and all or a substantial portion of the assets of these persons is located outside the United States. It may be difficult for investors who reside in the United States to effect service of process upon these persons in the United States, or to enforce a U.S. court judgment predicated upon the civil liability provisions of the U.S. federal securities laws against us or any of these persons. There is substantial doubt whether an action could be brought in Canada in the first instance predicated solely upon U.S. federal securities laws. Canadian courts may refuse to hear a claim based on an alleged violation of U.S. securities laws against us or these persons on the grounds that Canada is not the most appropriate forum in which to bring such a claim. Even if a Canadian court agrees to hear a claim, it may determine that Canadian law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Canadian law.

Our by-laws provide that any derivative actions, actions relating to breach of fiduciary duties and other matters relating to our internal affairs will be required to be litigated in Canada, which could limit investors' ability to obtain a favorable judicial forum for disputes with us.

We have adopted a forum selection by-law that provides that, unless we consent in writing to the selection of an alternative forum, the Superior Court of Justice of the Province of Ontario, Canada and appellate Courts therefrom (or, failing such Court, any other "court" as defined in the CBCA having jurisdiction, and the appellate Courts therefrom), will be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf; (2) any action or proceeding asserting a breach of fiduciary duty owed by any of our directors, officers or other employees to us; (3) any action or proceeding asserting a claim arising pursuant to any provision of the CBCA or our restated articles or by-laws; or (4) any action or proceeding asserting a claim otherwise related to our "affairs" (as defined in the CBCA). Our forum selection by-law also provides that our securityholders are deemed to have consented to personal jurisdiction in the Province of Ontario and to service of process on their counsel in any foreign action initiated in violation of our by-law. Therefore, it may not be possible for securityholders to litigate any action relating to the foregoing matters outside of the Province of Ontario.

Our forum selection by-law seeks to reduce litigation costs and increase outcome predictability by requiring derivative actions and other matters relating to our affairs to be litigated in a single forum. While forum selection clauses in corporate charters and by-laws are becoming more commonplace for public companies in the United States and have been upheld by courts in certain states, they are untested in Canada. It is possible that the validity of our forum selection by-law could be challenged and that a court could rule that such by-law is inapplicable or unenforceable. If a court were to find our forum selection by-law inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions and we may not obtain the benefits of limiting jurisdiction to the courts selected.

Provisions of our charter documents and certain Canadian legislation could delay or deter a change of control, limit attempts by our shareholders to replace or remove our current senior management and affect the market price of our Class A subordinate voting shares.

Our restated articles of incorporation authorize our board of directors to issue an unlimited number of preferred shares without shareholder approval and to determine the rights, privileges, restrictions and conditions granted to or imposed on any unissued series of preferred shares. Those rights may be superior to those of our Class A subordinate voting shares and Class B multiple voting shares. For example, preferred shares may rank prior to Class A subordinate voting shares and Class B multiple voting shares as to dividend rights, liquidation preferences or both, may have full or limited voting rights and may be convertible into Class A subordinate voting shares or Class B multiple voting shares. If we were to issue a significant number of preferred shares, these issuances could deter or delay an attempted acquisition of us or make the removal of management more difficult, particularly in the event that we issue preferred shares with special voting rights. Issuances of preferred shares, or the perception that such issuances may occur, could cause the trading price of our Class A subordinate voting shares to drop.

In addition, provisions in the CBCA and in our restated articles of incorporation and by-laws may have the effect of delaying or preventing changes in our senior management, including provisions that:

- require that any action to be taken by our shareholders be effected at a duly called annual or special meeting and not by written consent;
- establish an advance notice procedure for shareholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors; and
- require the approval of a two-thirds majority of the votes cast by shareholders present in person or by proxy in order to amend certain provisions of our restated articles of incorporation, including, in some circumstances, by separate class votes of holders of our Class A subordinate voting shares and Class B multiple voting shares.

These provisions may frustrate or prevent any attempts by our shareholders to launch a proxy contest or replace or remove our current senior management by making it more difficult for shareholders to replace members of our board of directors, which is responsible for appointing the members of our senior management. Any of these provisions could have the effect of delaying, preventing or deferring a change in control which could limit the opportunity for our Class A subordinate voting shareholders to receive a premium for their Class A subordinate voting shares, and could also affect the price that investors are willing to pay for Class A subordinate voting shares.

Our constating documents permit us to issue an unlimited number of Class A subordinate voting shares and Class B multiple voting shares.

Our restated articles of incorporation permit us to issue an unlimited number of Class A subordinate voting shares and Class B multiple voting shares. We anticipate that we will, from time to time, issue additional Class A subordinate voting shares in the future. Subject to the requirements of the NYSE and the TSX, we will not be required to obtain the approval of shareholders for the issuance of additional Class A subordinate voting shares. Although the rules of the TSX generally prohibit us from issuing additional Class B multiple voting shares, there may be certain circumstances where additional Class B multiple voting shares may be issued, including upon receiving shareholder approval and pursuant to the exercise of stock options under our fourth amended and restated option plan (the "Legacy Option Plan") that were granted prior to our initial public offering. Any further issuances of Class A subordinate voting shares or Class B multiple voting shares will result in immediate dilution to existing shareholders and may have an adverse effect on the value of their shareholdings. Additionally, any further issuances of Class B multiple voting shares may significantly lessen the combined voting power of our Class A subordinate voting shares due to the 10-to-1 voting ratio between our Class B multiple voting shares and Class A subordinate voting shares.

DIVIDENDS AND DISTRIBUTIONS

We have, to date, not declared or paid any dividends or distributions on our securities. We currently intend to retain any future earnings to fund the development and growth of our business and we do not currently anticipate paying dividends. Any determination to pay dividends to holders of shares in the future will be at the discretion of our board of directors and will depend on many factors, including our financial condition, earnings, legal requirements and other factors as the board of directors deems relevant. In addition, our outstanding credit agreement limits our ability to pay dividends and we may in the future become subject to debt instruments or other agreements that further limit our ability to pay dividends.

CAPITAL STRUCTURE

General

The following is a description of the material terms of our Class A subordinate voting shares, our Class B multiple voting shares, and our preferred shares, as set forth in our restated articles of incorporation.

Our authorized share capital consists of an unlimited number of Class A subordinate voting shares of which 98,352,852 were issued and outstanding as of February 7, 2019, an unlimited number of Class B multiple voting shares of which 12,283,365 were issued and outstanding as of February 7, 2019, and an unlimited number of preferred shares, issuable in series, none of which are issued and outstanding. Although the rules of the TSX generally prohibit us from issuing additional Class B multiple voting shares, there may be certain circumstances where additional Class B multiple voting shares may be issued, including upon receiving shareholder approval and pursuant to the exercise of stock options under our legacy stock option plan that were granted prior to our initial public offering.

The Class A subordinate voting shares are "restricted securities" within the meaning of such term under applicable Canadian securities laws.

Shares

Except as described herein, the Class A subordinate voting shares and the Class B multiple voting shares have the same rights, are equal in all respects and are treated by Shopify as if they were one class of shares.

Rank

The Class A subordinate voting shares and Class B multiple voting shares rank *pari passu* with respect to the payment of dividends, return of capital and distribution of assets in the event of the liquidation, dissolution or winding up of the Company. In the event of the liquidation, dissolution or winding-up of the Company or any other distribution of its assets among its shareholders for the purpose of winding-up its affairs, whether voluntarily or involuntarily, the holders of Class A subordinate voting shares and the holders of Class B multiple voting shares are entitled to participate equally in the remaining property and assets of the Company available for distribution to the holders of shares, without preference or distinction among or between the Class A subordinate voting shares and the Class B multiple voting shares, subject to the rights of the holders of any preferred shares.

Dividends

The holders of outstanding Class A subordinate voting shares and Class B multiple voting shares are entitled to receive dividends on a share for share basis at such times and in such amounts and form as our board of directors may from time to time determine, but subject to the rights of the holders of any preferred shares, without preference or distinction among or between the Class A subordinate voting shares and the Class B multiple voting shares. We are permitted to pay dividends unless there are reasonable grounds for believing that: (i) we are, or would after such payment be, unable to pay our liabilities as they become due; or (ii) the realizable value of our assets would, as a result of such payment, be less than the aggregate of our liabilities and stated capital of all classes of shares. In the event of a payment of a dividend in the form of shares, Class A subordinate voting shares shall be distributed with respect to outstanding Class A subordinate voting shares and Class B multiple voting shares shall be distributed with respect to outstanding Class B multiple voting shares, unless otherwise determined by our board.

Voting Rights

Under our restated articles of incorporation, each Class A subordinate voting share is entitled to one vote per share and each Class B multiple voting share is entitled to 10 votes per share. Our Class A subordinate voting shares currently collectively represent 88.9% of our total issued and outstanding shares and 44.5% of the voting power attached to all of our issued and outstanding shares and the Class B multiple voting shares currently collectively represent 11.1% of our total issued and outstanding shares and 55.5% of the voting power attached to all of our issued and outstanding shares.

Conversion

The Class A subordinate voting shares are not convertible into any other class of shares. Each outstanding Class B multiple voting share may at any time, at the option of the holder, be converted into one Class A subordinate voting share. Upon the first date that a Class B multiple voting share is Transferred (as defined below) by a holder of Class B multiple voting shares, other than to a Permitted Holder (as defined below) or from any such Permitted Holder back to such holder of Class B multiple voting shares and/or any other Permitted Holder of such holder of Class B multiple voting shares, the holder thereof, without any further action, shall automatically be deemed to have exercised his, her or its rights to convert such Class B multiple voting share into a fully paid and non-assessable Class A subordinate voting share, on a share for share basis.

In addition, all Class B multiple voting shares will convert automatically into Class A subordinate voting shares on the date on which the outstanding Class B multiple voting shares represent less than 5% of the aggregate number of outstanding Class A subordinate voting shares and Class B multiple voting shares as a group.

For the purposes of the foregoing:

"Affiliate" means, with respect to any specified Person, any other Person which directly or indirectly through one or more intermediaries controls, is controlled by, or is under common control with such specified Person;

"Members of the Immediate Family" means with respect to any individual, each parent (whether by birth or adoption), spouse, or child or other descendants (whether by birth or adoption) of such individual, each spouse of any of the aforementioned Persons, each trust created solely for the benefit of such individual and/or one or more of the aforementioned Persons, and each legal representative of such individual or of any aforementioned Persons (including without limitation a tutor, curator, mandatary due to incapacity, custodian, guardian or testamentary executor), acting in such capacity under the authority of the law, an order from a competent tribunal, a will or a mandate in case of incapacity or similar instrument. For the purposes of this definition, a Person shall be considered the spouse of an individual if such Person is legally married to such individual, lives in a civil union with such individual or is the common law partner (as defined in the *Income Tax Act* (Canada) as amended from time to time) of such individual. A Person who was the spouse of an individual within the meaning of this paragraph immediately before the death of such individual shall continue to be considered a spouse of such individual after the death of such individual;

"Permitted Holders" means, in respect of a holder of Class B multiple voting shares that is an individual, the Members of the Immediate Family of such individual and any Person controlled, directly or indirectly, by any such holder, and in respect of a holder of Class B multiple voting shares that is not an individual, an Affiliate of that holder;

"Person" means any individual, partnership, corporation, company, association, trust, joint venture or limited liability company;

"Transfer" of a Class B multiple voting share shall mean any sale, assignment, transfer, conveyance, hypothecation or other transfer or disposition of such share or any legal or beneficial interest in such share, whether or not for value and whether voluntary or involuntary or by operation of law. A "Transfer" shall also include, without limitation, (1) a transfer of a Class B multiple voting share to a broker or other nominee (regardless of whether or not there is a corresponding change in beneficial ownership) or (2) the transfer of, or entering into a binding agreement with respect to, Voting Control over a Class B multiple voting share by proxy or otherwise, provided, however, that the following shall not be considered a "Transfer": (a) the grant of a proxy to our officers or directors at the request of our board of directors in connection with actions to be taken at an annual or special meeting of shareholders; or (b) the pledge of a Class B multiple voting share that creates a mere security interest in such share pursuant to a bona fide loan or indebtedness transaction so long as the holder of the Class B multiple voting share continues to exercise Voting Control over such pledged shares; provided, however, that a foreclosure on such Class B multiple voting share or other similar action by the pledgee shall constitute a "Transfer";

"Voting Control" with respect to a Class B multiple voting share means the exclusive power (whether directly or indirectly) to vote or direct the voting of such Class B multiple voting share by proxy, voting agreement or otherwise.

A Person is "controlled" by another Person or other Persons if: (1) in the case of a company or other body corporate wherever or however incorporated: (A) securities entitled to vote in the election of directors carrying in the aggregate at least a majority of the votes for the election of directors and representing in the aggregate at least a majority of the participating (equity) securities are held, other than by way of security only, directly or indirectly, by or solely for the benefit of the other Person or Persons; and (B) the votes carried in the aggregate by such securities are entitled, if exercised, to elect a majority of the board of directors of such company or other body corporate; or (2) in the case of a Person that is not a company or other body corporate, at least a majority of the participating (equity) and voting interests of such Person are held, directly or indirectly, by or solely for the benefit of the other Person or Persons; and "controls", "controlling" and "under common control with" shall be interpreted accordingly.

Subdivision or Consolidation

No subdivision or consolidation of the Class A subordinate voting shares or the Class B multiple voting shares may be carried out unless, at the same time, the Class B multiple voting shares or the Class A subordinate voting shares, as the case may be, are subdivided or consolidated in the same manner and on the same basis.

Certain Class Votes

Except as required by the CBCA, applicable securities laws or our restated articles of incorporation, holders of Class A subordinate voting shares and Class B multiple voting shares will vote together on all matters subject to a vote of holders of both those classes of shares as if they were one class of shares. Under the CBCA, certain types of amendments to our restated articles of incorporation are subject to approval by special resolution of the holders of our classes of shares voting separately as a class, including amendments to:

- change the rights, privileges, restrictions or conditions attached to the shares of that class;
- increase the rights or privileges of any class of shares having rights or privileges equal or superior to the shares of that class; and
- make any class of shares having rights or privileges inferior to the shares of such class equal or superior to the shares of that class.

Without limiting other rights at law of any holders of Class A subordinate voting shares or Class B multiple voting shares to vote separately as a class, neither the holders of the Class A subordinate voting shares nor the holders of the Class B multiple voting shares shall be entitled to vote separately as a class upon a proposal to amend our restated articles of incorporation in the case of an amendment to (1) increase or decrease any maximum number of authorized shares of such class, or increase any maximum number of authorized shares of a class having rights or privileges equal or superior to the shares of such class; or (2) create a new class of shares equal or superior to the shares of such class, which rights are otherwise provided for in paragraphs (a) and (e) of subsection 176(1) of the CBCA. Pursuant to our restated articles of incorporation, neither holders of our Class A subordinate voting shares nor holders of our Class B multiple voting shares will be entitled to vote separately as a class on a proposal to amend our restated articles of incorporation to effect an exchange, reclassification or cancellation of all or part of the shares of such class pursuant to Section 176(1)(b) of the CBCA unless such exchange, reclassification or cancellation: (a) affects only the holders of that class; or (b) affects the holders of Class A subordinate voting shares and Class B multiple voting shares differently, on a per share basis, and such holders are not already otherwise entitled to vote separately as a class under applicable law or our restated articles of incorporation in respect of such exchange, reclassification or cancellation.

Pursuant to our restated articles of incorporation, holders of Class A subordinate voting shares and Class B multiple voting shares will be treated equally and identically, on a per share basis, in certain change of control transactions that require approval of our shareholders under the CBCA, unless different treatment of the shares of each such class is approved by a majority of the votes cast by the holders of our Class A subordinate voting shares and Class B multiple voting shares, each voting separately as a class.

Take-Over Bid Protection

Under applicable Canadian law, an offer to purchase Class B multiple voting shares would not necessarily require that an offer be made to purchase Class A subordinate voting shares. In accordance with the rules of the TSX designed to ensure that, in the event of a take-over bid, the holders of Class A subordinate voting shares will be entitled to participate on an equal footing with holders of Class B multiple voting shares, upon the completion of our initial public offering the holders of over 80% of the then outstanding Class B multiple voting shares entered into a customary coattail agreement with Shopify and a trustee, which we refer to as the Coattail Agreement. The Coattail Agreement contains provisions customary for dual class, TSX listed corporations designed to prevent transactions that otherwise would deprive the holders of Class A subordinate voting shares of rights under the take-over bid provisions of applicable Canadian securities legislation to which they would have been entitled if the Class B multiple voting shares had been Class A subordinate voting shares.

The undertakings in the Coattail Agreement will not apply to prevent a sale of Class B multiple voting shares by a holder of Class B multiple voting shares party to the Coattail Agreement if concurrently an offer is made to purchase Class A subordinate voting shares that:

(a) offers a price per Class A subordinate voting share at least as high as the highest price per share paid or required to be paid pursuant to the take-over bid for the Class B multiple voting shares;
(b) provides that the percentage of outstanding Class A subordinate voting shares to be taken up (exclusive of shares owned immediately prior to the offer by the offeror or persons acting jointly or in concert with the offeror) is at least as high as the percentage of outstanding Class B multiple voting shares to be sold (exclusive of Class B multiple voting shares owned immediately prior to the offer by the offeror and persons acting jointly or in concert with the offeror);
(c) has no condition attached other than the right not to take up and pay for Class A subordinate voting shares tendered if no shares are purchased pursuant to the offer for Class B multiple voting shares; and
(d) is in all other material respects identical to the offer for Class B multiple voting shares.

In addition, the Coattail Agreement will not prevent the sale of Class B multiple voting shares by a holder thereof to a Permitted Holder, provided such sale does not or would not constitute a take-over bid or, if so, is exempt or would be exempt from the formal bid requirements (as defined in applicable securities legislation). The conversion of Class B multiple voting shares into Class A subordinate voting shares, shall not, in of itself constitute a sale of Class B multiple voting shares for the purposes of the Coattail Agreement.

Under the Coattail Agreement, any sale of Class B multiple voting shares (including a transfer to a pledgee as security) by a holder of Class B multiple voting shares party to the Coattail Agreement will be conditional upon the transferee or pledgee becoming a party to the Coattail Agreement, to the extent such transferred Class B multiple voting shares are not automatically converted into Class A subordinate voting shares in accordance with our restated articles of incorporation.

The Coattail Agreement contains provisions for authorizing action by the trustee to enforce the rights under the Coattail Agreement on behalf of the holders of the Class A subordinate voting shares. The obligation of the trustee to take such action will be conditional on Shopify or holders of the Class A subordinate voting shares providing such funds and indemnity as the trustee may require. No holder of Class A subordinate voting shares will have the right, other than through the trustee, to institute any action or proceeding or to exercise any other remedy to enforce any rights arising under the Coattail Agreement unless the trustee fails to act on a request authorized by holders of not less than 10% of the outstanding Class A subordinate voting shares and reasonable funds and indemnity have been provided to the trustee.

The Coattail Agreement provides that it may not be amended, and no provision thereof may be waived, unless, prior to giving effect to such amendment or waiver, the following have been obtained: (a) the consent of the TSX and any other applicable securities regulatory authority in Canada and (b) the approval of at least 66 2/3% of the votes cast by holders of Class A subordinate voting shares represented at a meeting duly called for the purpose of considering such amendment or waiver, excluding votes attached to Class A subordinate voting shares held directly or indirectly by holders of Class B multiple voting shares, their affiliates and related parties and any persons who have an agreement to purchase Class B multiple voting shares on terms which would constitute a sale for purposes of the Coattail Agreement other than as permitted thereby.

No provision of the Coattail Agreement will limit the rights of any holders of Class A subordinate voting shares under applicable law.

Preferred Shares

We are authorized to issue an unlimited number of preferred shares issuable in series. Each series of preferred shares shall consist of such number of shares and having such rights, privileges, restrictions and conditions as may be determined by our board of directors prior to the issuance thereof. Holders of preferred shares, except as otherwise provided in the terms specific to a series of preferred shares or as required by law, will not be entitled to vote at meetings of holders of shares, and will not be entitled to vote separately as a class upon a proposal to amend our restated articles of incorporation in the case of an amendment of the kind referred to in paragraph (a), (b) or (e) of subsection 176(1) of the CBCA. With respect to the payment of dividends and distribution of assets in the event of liquidation, dissolution or winding-up of the company, whether voluntary or involuntary, the preferred shares are entitled to preference over the Class A subordinate voting shares, Class B multiple voting shares and any other shares ranking junior to the preferred shares from time to time and may also be given such other preferences over Class A subordinate voting shares, Class B multiple voting shares and any other shares ranking junior to the preferred shares as may be determined at the time of creation of such series.

The issuance of preferred shares and the terms selected by our board of directors could decrease the amount of earnings and assets available for distribution to holders of our Class A subordinate voting shares and Class B multiple voting shares or adversely affect the rights and powers, including the voting rights, of the holders of our Class A subordinate voting shares and Class B multiple voting shares without any further vote or action by the holders of our Class A subordinate voting shares and Class B multiple voting shares. The issuance of preferred shares, or the issuance of rights to purchase preferred shares, could make it more difficult for a third-party to acquire a majority of our outstanding voting shares and thereby have the effect of delaying, deferring or preventing a change of control of us or an unsolicited acquisition proposal or of making the removal of management more difficult. Additionally, the issuance of preferred shares may have the effect of decreasing the market price of our Class A subordinate voting shares.

We have no current intention to issue any preferred shares.

Registration Rights

Our Third Amended and Restated Investors’ Rights Agreement (the "Registration Rights Agreement"), provides certain holders of our Class B multiple voting shares with registration rights in respect of (i) the Class A subordinate voting shares issuable or issued upon conversion of the Class B multiple voting shares held by such holders, (ii) any Class A subordinate voting shares held by such holders or any Class A subordinate voting shares issued or issuable upon conversion or exercise of any other securities issued by us and held by such holders; and (iii) any Class A subordinate voting shares issued as, or issuable upon conversion or exercise of any other securities issued as, a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) and (ii) above. We refer to these

Class A subordinate voting shares as "registrable securities".

We will pay the expenses, other than underwriting discounts, selling commissions and share transfer taxes incurred in connection with the registration, filing or qualification of registrable securities in accordance with the terms of the Registration Rights Agreement.

The registration rights provided for in the Registration Rights Agreement will expire with respect to any particular holder at such time that such holder (i) can sell all of its registrable securities under Rule 144(b)(1)(i) under the Securities Act or (ii) holds less than 1% of the outstanding Class A subordinate voting shares and Class B multiple voting shares, in the aggregate, and can sell its registrable securities during any three month period under Rule 144 of the Securities Act.

MARKET FOR SECURITIES

Trading Price and Volume

Our Class A subordinate voting shares are listed for trading on the Toronto Stock Exchange (TSX) and on the New York Stock Exchange (NYSE) under the trading symbol "SHOP". The following table sets forth the price ranges and volumes of Class A subordinate voting shares traded on the TSX and NYSE for each month of 2018.

	NYSE (US$)			TSX (CAD$)		
2018	High	Low	Volume	High	Low	Volume
January	130.47	101.02	23,924,570	160.69	126.65	6,344,391
February	146.12	112.06	47,639,233	184.35	140.70	11,563,425
March	154.82	118.57	38,524,502	202.45	153.04	8,527,633
April	134.43	112.50	40,390,595	172.47	143.01	5,455,529
May	150.97	118.81	38,853,690	194.33	153.25	5,942,101
June	175.11	140.40	31,756,084	232.65	186.31	5,584,186
July	176.60	133.26	31,335,418	232.43	174.13	4,397,306
August	151.18	132.34	30,062,453	198.50	172.90	4,955,587
September	168.95	130.60	26,992,183	217.77	172.10	4,690,725
October	166.86	122.05	47,198,032	213.97	159.25	8,915,888
November	152.89	122.00	30,361,089	203.15	162.00	7,690,217
December	164.13	117.64	41,706,634	219.30	160.02	8,566,126

Our Class B multiple voting shares are not listed for trading or quoted on any exchange or market; however, as described further above, at any time, at the option of the holder, Class B multiple voting shares can be converted into Class A subordinate voting shares on a one-for-one basis.

Our authorized share capital consists of an unlimited number of Class A subordinate voting shares of which 98,081,889 were issued and outstanding as of December 31, 2018, an unlimited number of Class B multiple voting shares of which 12,310,800 were issued and outstanding as of December 31, 2018, and an unlimited number of preferred shares, issuable in series, none of which are issued and outstanding.

Prior Sales

In 2018, 1,542,110 class B multiple voting shares were issued as a result of the exercise of options granted under our Legacy Option Plan, at a weighted average exercise price of US$2.32 per share.

DIRECTORS AND OFFICERS

Officers

Executive officers are appointed by the board of directors to serve, subject to the discretion of the board of directors, until their successors are appointed.

Tobias Lütke
Ontario, Canada
Tobias Lütke co-founded Shopify in September 2004. Mr. Lütke has served as our Chief Executive Officer since April 2008. Prior to that, Mr. Lütke acted as our Chief Technology Officer between September 2004 and April 2008. Mr. Lütke worked on the core team of the Ruby on Rails framework and has created many popular open source libraries such as Active Merchant. Mr. Lütke also serves as Chair of our Board of Directors.

Harley Finkelstein
Ontario, Canada
Harley Finkelstein is the Chief Operating Officer at Shopify and has been with the company since 2010. Prior to his current role, Harley founded numerous startups and ecommerce companies. He currently serves on the board of the Canadian Broadcasting Corporation and is an advisor to Felicis Ventures. Harley holds a Bachelor degree in Economics from Concordia University and a J.D./M.B.A. joint degree in Law and Business from the University of Ottawa.

Amy Shapero
Ontario, Canada
Amy Shapero is the Chief Financial Officer at Shopify and joined in April 2018. Prior to joining Shopify, Amy was the Chief Financial Officer at Betterment, an online wealth-management service, since 2016. Previously, Amy was Chief Financial Officer at Sailthru, and Senior Vice President of Strategy, Corporate Development and Corporate Communications at DigitalGlobe. Amy began her career as a CPA at Ernst & Young, followed by investment banking positions at Credit Suisse and Goldman Sachs serving emerging growth companies. She holds an MBA from the University of Chicago Booth School of Business.

Craig Miller
Ontario, Canada
Craig Miller joined Shopify in September 2011 and has been our Chief Product Officer since February 2017. Previous to that Craig acted as our Chief Marketing Officer and VP Marketing. In his current role, he oversees the Product, User Experience, Growth, Marketing, and Communications teams at the Company. Mr. Miller previously held several product and marketing roles at Kijiji, an eBay Company, between 2006 and 2011. Mr. Miller holds a Bachelor degree in Electrical Engineering from McGill University.

Jeff Weiser
New York, United States
Jeff Weiser is the Chief Marketing Officer at Shopify and joined the company in February 2018. Prior to joining Shopify, he served as Chief Marketing Officer at Shutterstock, Inc. (NYSE). Prior to that, Jeff held

multiple senior level positions with Beachbody LLC (creators of P90X and Shakeology), and Strategy and Analytics roles at SGN (Social Gaming Network), MySpace and Yahoo!. Jeff holds a B.A. in English from Yale University and an M.B.A from Columbia Business School.

Joseph Frasca
Ontario, Canada
Joseph Frasca is the Senior Vice President, General Counsel and Secretary at Shopify and has been with the company since May 2014. Prior to his appointment at Shopify, Mr. Frasca was Senior Corporate Counsel at EMC Corporation between May 2011 and May 2014 and Corporate Counsel at EMC Corporation between January 2008 and May 2011. Mr. Frasca also worked in private practice as an Associate at Skadden, Arps, Slate, Meagher & Flom LLP from 2004 to 2008. Mr. Frasca holds a J.D. from Boston University School of Law, a Master of Arts in Law and Diplomacy from The Fletcher School at Tufts University and a B.S. in Russian Language and Linguistics from Georgetown University. Mr. Frasca is a member of the Society of Corporate Secretaries & Governance Professionals sitting on the Securities Law Committee.

Brittany Forsyth
Ontario, Canada
Brittany Forsyth is the Senior Vice President of Human Relations at Shopify and has been in this role since 2014. She has been with the company since 2010 and previously served as the Director of HR. Ms. Forsyth is involved with a number of human resources organizations across North America. Prior to joining Shopify, Ms. Forsyth obtained a Bachelor of Commerce degree at Carleton University.

Jean-Michel Lemieux
Ontario, Canada
Jean-Michel Lemieux is the Senior Vice President of Engineering at Shopify and joined the company in 2015. Prior to joining Shopify, he served as the Vice President of Engineering at Atlassian and as the Chief Architect for Rational Team Concert, a division of IBM. Jean-Michel co-authored the book, Eclipse Rich Client Platform and has filed two U.S. patents on software configuration management. Jean-Michel holds a Bachelor’s degree in Computer Science from the University of Ottawa.

Directors

Our directors are either elected annually by the shareholders at the annual meeting of shareholders or, subject to our restated articles of incorporation and applicable law, appointed by our board of directors between annual meetings. Each director holds office until the close of the next annual meeting of our shareholders or until he or she ceases to be a director by operation of law, or until his or her removal or resignation becomes effective. In addition to Mr. Tobias Lütke, a director since 2004 who serves chair of the board as well as CEO, the Company's directors are as follows:

Robert Ashe
Ontario, Canada
Robert Ashe has served as a member of our board of directors since December 2014. Over 24 years, Mr. Ashe held a variety of positions with increasing responsibility at Cognos Incorporated, a business intelligence and performance management software company. Mr. Ashe ultimately served as Chief Executive Officer of Cognos Incorporated from 2005 to 2008 before the company was acquired by IBM. Mr. Ashe remained with IBM as a general manager of business analytics from 2008 to 2012. Mr. Ashe currently serves on the board of directors of Servicesource International (NASDAQ Stock Exchange, or NASDAQ) and MSCI Inc. (NYSE). Mr. Ashe holds a Bachelor of Commerce from the University of Ottawa and is a Fellow of the Institute of Chartered Accountants of Ontario.

Steven Collins
Florida, United States
Steven Collins has served as a member of our board of directors since June 2014. Mr. Collins served as the Executive Vice President and Chief Financial Officer of ExactTarget Inc., a cross-channel digital marketing company, from 2011 to 2014. Prior to that, Mr. Collins held the position of Senior Vice President and Chief Financial Officer of NAVTEQ Corporation, a digital mapping company; Mr. Collins was with NAVTEQ Corporation from 2003 through 2011 and served as the Vice President of Finance and the Senior Vice President of Finance & Accounting prior to being named Chief Financial Officer. Mr. Collins currently serves on the board of directors of Instructure (NYSE) and a number of privately held companies. Mr. Collins holds a B.S. degree in Industrial Engineering from Iowa State University and an M.B.A. from the Wharton School of the University of Pennsylvania.

Gail Goodman
Massachusetts, United States
Gail Goodman has served as a member of our board of directors since November 2016. Ms. Goodman most recently served as President and Chief Executive Officer of Constant Contact, a software company providing small businesses with online marketing tools to grow their businesses, for over 16 years. Over that time Ms. Goodman served as a director and chairwoman of the board and led Constant Contact through its initial public offering and for eight years as a publicly traded company, until its acquisition by Endurance International Group Holdings, Inc. (NASDAQ) in February 2016. Ms. Goodman holds a B.A. from the University of Pennsylvania and an M.B.A. from The Tuck School of Business at Dartmouth College. Ms. Goodman currently serves on the board of directors of MINDBODY, Inc. (NASDAQ), a provider of cloud-based business management software for the wellness services industry.

Colleen Johnston
Ontario, Canada
Colleen Johnston has served as a member of our board of directors since January 2019. Ms. Johnston is the former Chief Financial Officer of Toronto-Dominion Bank. Prior to her retirement in 2018 Colleen spent 14 years at TD, ten of which she spent as Group Head, Finance, Sourcing, Corporate Communications and Chief Financial Officer. Prior to TD, Ms. Johnston held senior leadership roles at Scotiabank over the course of 15 years, including as CFO of Scotia Capital. Ms. Johnston currently serves on the board of directors of WestJet (TSX), McCain Foods, Unity Health Toronto, and the Shaw Festival Theatre. Ms. Johnston holds a Bachelor of Business Administration from York University's Schulich School of Business and is a Fellow of the Institute of Chartered Accountants of Ontario.

Jeremy Levine
New York, United States
Jeremy Levine has served as a member of our board of directors since February 2011. Since January 2007, Mr. Levine has been a Partner at Bessemer Venture Partners, a venture capital firm he joined in May 2001. Mr. Levine currently serves on the board of directors of Yelp Inc. (NYSE), a local directory and user review service, and a number of privately held companies. Mr. Levine holds a B.S. degree in Computer Science from Duke University.

John Phillips
Ontario, Canada
John Phillips has served as a member of our board of directors since April 30, 2010. Mr. Phillips has worked with Klister Credit Corp., an investment and consulting company, and is currently its Chief Executive Officer, a position he has held since 1993. Mr. Phillips had a career in the legal profession working in private practice

at Blake, Cassels & Graydon LLP for 20 years and as general counsel at Clearnet Communications Inc. for nearly six years. Mr. Phillips currently serves on the board of directors of a number of privately held companies and gained experience serving on the board of directors of Redknee Solutions Inc., a public company. Mr. Phillips received a B.A. from Trinity College, University of Toronto and an L.L.B./J.D. from the Faculty of Law, University of Toronto.

Board Committees

Director	Audit Committee	Compensation Committee	Nominating and Corporate Governance Committee
Robert Ashe	Member	Chair	Member
Steven Collins	Chair		
Gail Goodman	Member	Member	Member
Colleen Johnston	Member		
Jeremy Levine			Member
John Phillips		Member	Chair
Tobias Lütke			

Audit Committee

Our audit committee is comprised of Robert Ashe, Steven Collins, Gail Goodman, and Colleen Johnston and is chaired by Mr. Collins. Our board of directors has determined that each of these directors meets the independence requirements, including the heightened independence standards for members of the audit committee, of the NYSE, the SEC and National Instrument 52-110 - Audit Committees ("NI 52-110"). Our board of directors has determined that each of the members of the audit committee is "financially literate" within the meaning of the NYSE rules and NI 52-110. Mr. Collins has been identified as an audit committee financial expert as defined by the SEC rules. For a description of the education and experience of each member of the audit committee, see "Directors", above.

Our board of directors has established a written charter setting forth the purpose, composition, authority and responsibility of the audit committee, consistent with the rules of the NYSE, the SEC and NI 52-110. A copy of the Audit Committee Charter is appended to this AIF as Exhibit A.

The principal purpose of our audit committee is to assist our board of directors in discharging its oversight of:

- the quality and integrity of our financial statements and related information;
- the independence, qualifications, appointment and performance of our external auditor;
- our disclosure controls and procedures, internal control over financial reporting and management's responsibility for assessing and reporting on the effectiveness of such controls;
- our compliance with applicable legal and regulatory requirements; and
- our enterprise risk management processes.

At least annually, the audit committee will review and confirm the independence of the auditor by obtaining statements from the independent auditor describing all relationships or services that may affect their independence and objectivity, and the committee will take appropriate actions to oversee our auditor.

Our audit committee has access to all of our books, records, facilities and personnel and may request any information about us as it may deem appropriate. It also has the authority in its sole discretion and at our expense, to retain and set the compensation of outside legal, accounting or other advisors as necessary to assist in the performance of its duties and responsibilities.

Our audit committee also reviews our policies and procedures for reviewing and approving or ratifying related-party transactions, and it is responsible for reviewing and approving or ratifying all related-party transactions.

Audit Committee Pre-Approval Policies and Procedures

From time to time, management recommends to and requests approval from the Audit Committee for audit and non-audit services to be provided by the Company's auditors. The Audit Committee considers such requests, if applicable, on a quarterly basis, and if acceptable, pre-approves such audit and non-audit services. During such deliberations, the Audit Committee assesses, among other factors, whether the services requested would be considered "prohibited services" as contemplated by the SEC, and whether the services requested and the fees related to such services could impair the independence of the Company's auditors.

The Audit Committee considered and agreed that the fees paid to the Company's auditors in the years ended December 31, 2018 and 2017 are compatible with maintaining the independence of the Company's auditors. The Audit Committee determined that, in order to ensure the continued independence of the auditors, only limited non-audit services will be provided to the Company by PricewaterhouseCoopers LLP.

Since the implementation of the Audit Committee pre-approval process in November 2015, all audit and non-audit services rendered by our auditors have been pre-approved by the Audit Committee.

Auditor Service Fees

The aggregate amounts paid or accrued by the Company with respect to fees payable to PricewaterhouseCoopers LLP, the auditors of the Company, for audit (including separate audits of wholly-owned and non-wholly owned entities, financings, regulatory reporting requirements and SOX related services), audit-related, tax and other services in the years ended December 31, 2018 and 2017 were as follows:

	Fiscal 2018	**Fiscal 2017**
	$	$
	(in thousands)	
Audit Fees	764	600
Audit-Related Fees	—	—
Tax Fees	—	—
All Other Fees	2	2
Total	766	602

Audit fees relate to the audit of our annual consolidated financial statements, the review of our quarterly condensed consolidated financial statements and services in connection with our registration statement on Form F-10 (related to our 2018 public offerings of Class A subordinate voting shares).

Audit-related fees consist of aggregate fees for accounting consultations and other services that were reasonably related to the performance of audits or reviews of our consolidated financial statements and were not reported above under "Audit Fees".

Tax fees relate to assistance with tax compliance, expatriate tax return preparation, tax planning and various tax advisory services.

Other fees are any additional amounts for products and services provided by the principal accountants other than the services reported above under "Audit Fees", "Audit-Related Fees" and "Tax Fees".

Ownership of Securities

As of February 7, 2019, as a group, our directors and executive officers beneficially own, or control or direct, directly or indirectly, a total of 349,357 Class A subordinate voting shares and 11,858,504 Class B multiple voting shares, representing 0.4 % of the Class A subordinate voting shares and 96.5 % of the Class B multiple voting shares outstanding and 53.77 % of the voting power attached to all of our issued and outstanding shares.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

To the knowledge of Shopify, no director or executive officer of Shopify (a) is at the date hereof or has been, in the last 10 years before the date hereof, a director, chief executive officer (CEO) or chief financial officer (CFO) of any company, including Shopify, that (i) was subject to a cease trade order, similar order or an order that denied the relevant company access to any exemptions under securities legislation, for a period of more than 30 consecutive days (an "Order") that was issued while the director or executive officer was acting in that capacity; or, (ii) was subject to an Order that was issued after the director or executive officer ceased to be a director, CEO or CFO and which resulted from an event that occurred while that person was acting in the capacity as director, CEO or CFO.

To the knowledge of Shopify, no director or executive officer of Shopify, and no shareholder holding a sufficient number of securities of Shopify to affect materially the control of Shopify, is at the date hereof or has been in the 10 years before the date hereof, a director or executive officer of a company, including Shopify that, while that person was acting in that capacity or within a year of that person ceasing to act in that capacity became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold its assets, except for:

- Jeremy Levine, who, until June 4, 2018, was a board member of Onestop Internet Inc., a corporation that made an assignment for the benefit of creditors on June 4, 2018. The sale of assets has been completed, and the liquidation is in process.

To the knowledge of Shopify, no director or executive officer of Shopify, and no shareholder holding a sufficient number of securities of Shopify to affect materially the control of Shopify, has, within the last 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

Conflicts of Interest

To the Company's knowledge, there are no existing or potentially material conflicts of interest between the Company or a subsidiary of the Company and any director or officer of the Company or of a subsidiary of the Company.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

We are involved in legal proceedings, as well as demands, claims and threatened litigation, that arise in the normal course of our business. In particular, as is common in our industry, we have received notices alleging that we infringe patents belonging to various third parties. These notices are dealt with in accordance with our internal procedures, which include assessing the merits of each notice and seeking, where appropriate, a business resolution. Where a business resolution cannot be reached, litigation may be necessary. The ultimate outcome of any litigation is uncertain, and regardless of outcome, litigation can have an adverse impact on our business because of defense costs, negative publicity, diversion of management resources and other factors. Our failure to obtain any necessary license or other rights on commercially reasonable terms, or otherwise, or litigation arising out of intellectual property claims could materially adversely affect our business. As of the date of this AIF, we are not party to any litigation that we believe is material to our business.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

No director or executive officer of Shopify, and to the knowledge of the directors and executive officers of Shopify, (i) no person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10 percent of Shopify's voting shares, (ii) nor any of such persons' or companies' associates or affiliates, (iii) nor any associates or affiliates of any director of executive officer of Shopify, has had a material interest, direct or indirect, that has materially affected or is reasonably expected to materially affect the Company within the three most recently completed financial years or during the current financial year.

TRANSFER AGENTS AND REGISTRARS

The transfer agent and registrar for our Class A subordinate voting shares in the United States is Computershare Trust Company, N.A. at its principal office in Canton, Massachusetts, and in Canada is Computershare Investor Services Inc. at its principal office in Toronto, Ontario.

MATERIAL CONTRACTS

The following are the only material contracts, other than those contracts entered into in the ordinary course of business, which have been entered into by the Company within the most recently completed fiscal year, or were entered into before the most recently completed fiscal year and are still in effect, deemed to be material:

- Coattail Agreement dated as of May 27, 2015, in connection with our Class B Multiple Voting Shares
- Third Amended and Restated Investors’ Rights Agreement dated May 27, 2015

- Payment Services Provider Agreement, dated July 22, 2013, between Stripe, Inc. and Shopify Payments (USA) Inc. and the addendum to Payment Services Provider Agreement for Canada, dated July 22, 2013, among Stripe, Inc., Shopify Payments (USA) Inc. and Shopify Payments (Canada) Inc.

Copies of the above material agreements may be inspected during ordinary business hours at our principal executive offices located at 150 Elgin Street, 8th Floor, Ottawa, Canada, K2P 1L4 or may be viewed at the website maintained by the SEC at http://www.sec.gov or the website maintained by the Canadian Securities Administrators at http://www.sedar.com.

INTERESTS OF EXPERTS

PricewaterhouseCoopers LLP are the auditors of Shopify and are independent within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of Ontario.

ADDITIONAL INFORMATION

Additional information about Shopify is available on our website at www.shopify.com, on t he website maintained by the SEC at www.sec.gov or the website maintained by the Canadian Securities Administrators at www.sedar.com.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of our securities and securities authorized for issuance under equity compensation plans will be contained in our management information circular that will be filed in connection with our next annual meeting of shareholders. Once filed, the circular will be available on our website at www.shopify.com, or at www.sec.gov or www.sedar.com.

Additional financial information is provided in our consolidated financial statements and MD&A for the fiscal year ended December 31, 2018, available on our website at www.shopify.com, or at www.sec.gov or www.sedar.com.

We are a "foreign private issuer" as such term is defined in Rule 405 under the U.S. Securities Act of 1933, as amended, and are not subject to the same requirements that are imposed upon U.S. domestic issuers by the SEC. Under the U.S. Securities Exchange Act of 1934, as amended, we are subject to reporting obligations that, in certain respects, are less detailed and less frequent than those of U.S. domestic reporting companies. As a result, we do not file the same reports that a U.S. domestic issuer would file with the SEC, although we are required to file or furnish to the SEC the continuous disclosure documents that we are required to file in Canada under Canadian securities laws.

We will provide without charge to each person, including any beneficial owner, on the written or oral request of such person, a copy of any or all documents referred to above which have been or may be incorporated by reference in this Annual Information Form or our Annual Report on Form 40-F for the year ended December 31, 2018 (not including exhibits to such incorporated reports that are not specifically incorporated by reference into such reports). Requests for such copies should be directed to us via email to IR@shopify.com, by calling 1 (888) 746-7439, or by writing to Investor Relations, Shopify Inc., 150 Elgin Street, 8th Floor, Ottawa, ON, K2P 1L4, Canada.

EXHIBIT A
SHOPIFY INC.
AUDIT COMMITTEE CHARTER

This Audit Committee Charter (“ **Charter** ”) has been adopted by the Board of Directors (“ **Board** ”) of Shopify Inc. (“ **Company** ”) and sets forth the purpose, composition, authority and responsibility of the Audit Committee (“ **Committee** ”) of the Board.

I. Purpose

The Committee’s purpose is to assist the Board in its oversight of:

- the quality and integrity of the Company’s financial statements and related information;
- the independence, qualifications, appointment and performance of the Company’s external auditor (“ **external auditor** ”);
- the Company’s disclosure controls and procedures, internal controls over financial reporting, and management’s responsibility for assessing and reporting on the effectiveness of such controls;
- the Company’s compliance with applicable legal and regulatory requirements; and
- the Company’s enterprise risk management processes.

II. Access to Information and Authority

In carrying out its duties and responsibilities, the Committee shall have the authority to:

- communicate directly with the external auditors and to meet with and seek any information it requires from employees, officers, directors, or external parties;
- investigate any matter relating to the Company’s accounting, auditing, internal control or financial reporting practices or anything else within its scope of responsibility;
- obtain full access to all Company books, records, facilities and personnel; and
- at its sole discretion and at the Company’s expense, retain and set the compensation of outside legal, accounting, or other advisors, as necessary to assist in the performance of its duties and responsibilities.

The Company will provide appropriate funding, as determined by the Committee, for compensation to the external auditor, to any advisors that the Committee chooses to engage, and for payment of ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

III. Composition and meetings

The Board shall elect annually from among its members the Committee, which shall be composed of three or more directors as determined by the Board, each of whom shall meet all applicable standards of independence and financial literacy under applicable laws, regulations and rules, which determination of independence will be made by the Board. At least one member shall be designated as an “audit committee financial expert” as defined by applicable legislation and regulation, including within the meaning of Section 407 of the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder by the SEC.

The Board may remove members of the Committee at any time, with or without cause.

The Chair shall be designated by the Board; *provided* , that if the Board does not so designate a Chair, the Committee shall choose one of its members to be its Chair by majority vote. The Chair shall have the duties and responsibilities set out in Section VI.

The Committee will meet at least quarterly, or more frequently as circumstances dictate. The Committee shall be convened whenever requested by external auditors or any member of the Committee or otherwise as required by law. The external auditors shall be entitled to receive notice of every meeting of the Committee and to attend and be heard at all such meetings. The Committee shall periodically meet separately with management and the external auditors in executive sessions. In addition, the Committee shall periodically meet with the external auditors and management to discuss the annual audited financial statements and quarterly financial statements, including the Company's disclosure under "Management's Discussion and Analysis of Financial Condition and Results of Operations". Subject to applicable law and exchange requirements, the Committee and the Chair may invite any director, executive, employee, or such other person as it deems appropriate to attend and participate in any portion of any Committee meeting, and may exclude from all or any portion of its meetings any person it deems appropriate in order to carry out its responsibilities. The Committee will also meet before or after each regularly scheduled meeting *in camera* . Meetings may be held in person or by tele- or video-conference. The Committee may also act by unanimous written consent, whether given in writing or electronically, in lieu of a meeting.

Unless otherwise determined from time to time by resolution of the Board, a majority of members of the Committee shall constitute a quorum for the transaction of business at a meeting. For any meeting(s) at which the Committee Chair is absent, the Chair of the meeting shall be the person present who shall be decided upon by all members present. At a meeting, any question shall be decided by a majority of the votes cast by members of the Committee, except where only two members are present, in which case any question shall be decided unanimously. Unless otherwise determined by resolution of the Board, the Corporate Secretary of the Company or his/her delegate shall be the Secretary of the Committee. The Committee will maintain written minutes of its meetings and copies of written consents. The Committee shall report regularly to the Board.

I. **Responsibilities and Duties of the Committee**

In addition to such other duties as may from time to time be expressly assigned to the Committee by the Board, the Committee shall have the following responsibilities and duties:

Financial Reporting

1. Prepare an audit committee report, if required, to be included in the Company's annual proxy statement.

2. Prior to their public disclosure, review and discuss with management and, if applicable, the external auditor:

   - the Company's annual financial statements and the related Management's Discussion and Analysis (" **MD&A** "), including the discussion of critical accounting estimates included therein and, if appropriate, recommend to the Board the approval, filing and disclosure of such information;

   - the Company's annual earnings press releases, including any pro forma or non-GAAP information included therein and, if appropriate, recommend to the Board the approval, filing and disclosure of such information;

- the Company's quarterly unaudited financial statements and associated MD&A, including the discussion of critical accounting estimates included therein and, if appropriate, approve the filing and disclosure of such information;
- the Company's quarterly earnings press releases, including any pro forma or non-GAAP information included therein and, if appropriate, approve the filing and disclosure of such information;
- the type and presentation of financial information and earnings guidance provided to analysts, ratings agencies and others;
- to the extent they include financial information extracted or derived from the Company's financial statements, other public reports or filings by the Company, including the Company's annual information and proxy statements, approve such information, or where appropriate recommend to the board their approval; and
- internal controls (or summaries thereof) and the integrity of the financial reporting and related attestations by the external auditors of the Company's internal controls over financial reporting.

External Auditor

3. Review, report and approve of, or where appropriate provide recommendations to the Board as to, the appointment, term, compensation and review of engagement, removal, independence, audit plan (including the timing and scope of the audit), estimated and actual fees and contractual arrangements of the external auditor. The external auditor will report directly to the Committee and the Committee will oversee the work performed by the external auditor and the resolution of disagreements between management and the external auditor if they arise, taking into account where appropriate the opinions of management.

4. Review the external auditors' management letters and management's responses to such letters.

5. At least annually, the Committee shall assess the external auditor's independence. The Committee shall obtain and review a report by the external auditor describing all relationships between the external auditor and the Company, including the written disclosures and the letter from the external auditor required by applicable requirements. The Committee shall review any disclosed relationships or services that may affect the independence and objectivity of the auditor and take appropriate actions to oversee the external auditor.

6. Review and preapprove (which may be pursuant to preapproval policies and procedures) all audit and non-audit services to be provided by the external auditor. Delegate, if deemed appropriate, authority to one or more members of the Committee to grant preapprovals of audit and non-audit services, provided that any such approvals be presented to the Committee at its next scheduled meeting. Consider whether the auditor's provision of permissible non-audit services is compatible with the auditor's independence.

7. Discuss with the external auditor and management any matters required to be discussed in accordance with applicable Public Company Accounting Oversight Board (" **PCAOB** ") standards.

8. Meet periodically with the external auditor in the absence of management. Review with the external auditor any audit problems or difficulties the external auditor encountered in the course of the audit work and management's response, including any restrictions on the scope of the external auditor's activities or access to requested information and any significant disagreements with management.

9. Review and discuss the reports required to be made by the external auditor regarding:
   - critical accounting policies and practices;
   - material selections of accounting policies when there is a choice of policies available under GAAP that have been discussed with management, including the ramifications of the use of such alternative treatment, and the treatment preferred by the external auditor;
   - other material written communications between the external auditor and management; and,
   - any other matters required to be communicated to the Committee by applicable rules and regulations.

10. At least annually, obtain and review a report by the external auditor describing:
    - the external auditor's internal quality-control procedures;
    - any material issues raised by the most recent internal quality-control review or peer review, or by any inquiry or investigation by governmental or professional authorities within the preceding five years with respect to independent audits carried out by the external auditor, and any steps taken to deal with such issues; and,
    - all relationships between the external auditor and the Company, addressing the matters set forth in PCAOB Rule 3526. This report should be used to evaluate the external auditor's qualifications, performance, and independence. Further, the Committee will review the experience and qualifications of the lead partner each year and determine that all partner rotation requirements, as promulgated by applicable rules and regulations, are executed. The Committee will also consider whether there should be rotation of the external auditor itself. The Committee will present its conclusions to the Board.

11. Set policies, consistent with governing laws and regulations, for the hiring of current or former personnel of the external auditor.

Financial Reporting Processes, Accounting Policies and Internal Controls

12. Review and discuss with management and the external auditor, and monitor, report and where appropriate, provide recommendations to the Board on:

    - the adequacy and effectiveness of the Company's system of internal controls over financial reporting, including any significant deficiencies and significant changes in internal controls;
    - the integrity of the Company's external financial reporting processes;
    - the Company's disclosure controls and procedures, including any significant deficiencies in or material non-compliance with, such controls and procedures; and
    - the relationship of the Committee with other committees of the Board and management.

13. Understand the scope of the external auditors' review of internal control over financial reporting and obtain reports on significant findings and recommendations, together with management responses.

14. Review and discuss with the Company's Chief Executive Officer (" **CEO** ") and Chief Financial Officer (" **CFO** ") the process for the certifications to be provided and receive and review any

disclosure from the Company's CEO and CFO made in connection with the required certifications of the Company's quarterly and annual reports filed, including: a) any significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize, and report financial data; and b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls.

15. Review major issues and analyses prepared by management and/or the external auditor regarding accounting principles and financial reporting issues and judgments made in connection with the preparation of financial statements, including any significant changes in the Company's selection or application of accounting principles, the effect of alternative GAAP methods on the financial statements, complex or unusual transactions and highly judgmental areas, such as the presentation and impact of significant risks and uncertainties and key estimates and judgments of management that may be material to financial reporting, the effect of regulatory and accounting initiatives, as well as off-balance sheet structures, on the financial statements of the Company, and major issues as to the adequacy of the Company's internal controls, and any special audit steps adopted in light of material control deficiencies.

16. Review the Company's policies and procedures for reviewing and approving or ratifying related-party transactions. Review and approve or ratify all related-party transactions.

17. Establish and oversee procedures for the receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters, including procedures for confidential, anonymous submissions by employees regarding questionable accounting or auditing matters.

18. Meet periodically with management in the absence of the external auditor.

19. Consider the risk of management's ability to override the Company's internal controls.

Ethical and Legal Compliance and Risk Management

20. Review, with the Company's counsel, legal compliance and legal matters that could have a significant impact on the Company's financial statements. Review the effectiveness of the system for monitoring compliance with laws and regulations and the results of management's investigation and follow-up of any instances of non-compliance. Receive and review periodic reports from the Company with respect to the Company's pending or threatened material litigation. Review the appropriateness of the disclosure thereof in the documents reviewed by the Committee. Review, with Company's counsel, on a regular basis, any reports of whistleblowing, including any reports made to the Anonymous Helpline.

21. Discuss the Company's policies with respect to risk assessment and risk management, the Company's insurance coverage, as well as the Company's major financial risk exposures and the steps management has undertaken to control them.

22. Review the Company's compliance with internal policies and the Company's progress in remedying any material deficiencies that could have a significant impact on the Company.

23. Review the findings of any examinations by regulatory agencies, and any external auditors

observations made regarding those findings.

Other Responsibilities

24. Report regularly to the Board regarding the execution of the Committee's duties and responsibilities, activities, any issues encountered, and related recommendations.

25. Institute and oversee special investigations as needed.

26. Perform any other activities consistent with this Charter, the Company's by-laws, and governing laws that the Board or Committee determines are necessary or appropriate.

II. **Delegation of Authority**

The Committee may form subcommittees for any purpose that the Committee deems appropriate and may delegate to such subcommittees such power and authority as the Committee deems appropriate; *provided, however,* that no subcommittee shall consist of fewer than two members; and *provided further* that the Committee shall not delegate to a subcommittee any power or authority required by any law, regulation or listing standard to be exercised by the Committee as a whole.

III. **Responsibilities and Duties of the Chair**

The Chair shall have the following responsibilities and duties:

- chair meetings of the Committee;

- in consultation with the Board Chair and the Corporate Secretary, determine the frequency, dates and locations of meetings of the Committee;

- in consultation with the CEO, the CFO, the Corporate Secretary and others as required, review the annual work plan and the meeting agendas to ensure all required business is brought before the Committee;

- in consultation with the Board Chair, ensure that all items requiring the Committee's approval are appropriately tabled;

- report to the Board on the matters reviewed by, and on any decisions or recommendations of, the Committee at the next meeting of the Board following any meeting of the Committee; and

- carry out any other or special assignments or any functions as may be requested by the Board.

IV. **Limitation on Committee's Duties**

The Committee shall discharge its responsibilities, and shall assess the information provided by the Company's management and the external auditor, in accordance with its business judgment. Members of the Committee are not full-time employees of the Company and are not, and do not represent themselves to be, professional accountants or auditors. The authority and responsibilities set forth in this Charter do not reflect or create any duty or obligation of the Committee to (i) plan or conduct any audits, (ii) determine or certify that the Company's financial statements are complete, accurate, fairly presented or in accordance with generally accepted accounting principles or applicable law, (iii) guarantee the external auditor's reports, or (iv) provide any expert or special assurance as to the Company's internal controls or management of risk. Members of the Committee are entitled to rely, absent knowledge to the contrary, on the integrity of the persons and organizations from whom they receive information, the accuracy and completeness of the information provided, and representations made by management as to any audit or non-audit services provided by the external auditor.

Nothing in this Charter is intended or may be construed as imposing on any member of the Committee or the Board a standard of care or diligence that is in any way more onerous or extensive than the standard to which the directors are subject under applicable law. This Charter is not intended to change or interpret the amended articles of incorporation or by-laws of the Company or any federal, provincial, state or exchange law, regulation or rule to which the Company is subject, and this Charter should be interpreted in a manner consistent with all such applicable laws, regulations and rules . The Board may, from time to time, permit departures from the terms hereof, either prospectively or retrospectively, and no provision contained herein is intended to give rise to civil liability to securityholders of the Company or other liability whatsoever.

Any action that may or is to be taken by the Committee may, to the extent permitted by law or regulation, be taken directly by the Board.

V. **Evaluation of Committee**

The Committee shall, on an annual basis, review and evaluate its performance. In conducting this review, the Committee shall address such matters that the Committee considers relevant to its performance and evaluate whether this Charter appropriately addresses the matters that are or should be within its scope. The review and evaluation shall be conducted in such a manner as the Committee deems appropriate.

The Committee shall deliver to the Board a report, which may be oral, setting forth the results of its review and evaluation, including any recommended changes to this Charter and any recommended changes to the Company's or the Board's policies or procedures, as it deems necessary or appropriate.

* * * * *

Consolidated Financial Statements
December 31, 2018

Management's Annual Report on Internal Control Over Financial Reporting

Management of the Company, under the supervision of the Chief Executive Officer and the Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over the Company's financial reporting. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with United States generally accepted accounting principles.

We, including the Chief Executive Officer and Chief Financial Officer, have assessed the effectiveness of the Company's internal control over financial reporting in accordance with Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, we, including the Chief Executive Officer and Chief Financial Officer, have determined that the Company's internal control over financial reporting was effective as at December 31, 2018 . Additionally, based on our assessment, we determined that there were no material weaknesses in the Company's internal control over financial reporting as at December 31, 2018 .

The effectiveness of the Company's internal control over financial reporting as at December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report included herein.

February 12, 2019

/s/ Tobias Lütke

Tobias Lütke
Chief Executive Officer

/s/ Amy Shapero

Amy Shapero
Chief Financial Officer

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Shopify Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Shopify Inc. and its subsidiaries, (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations and comprehensive loss, changes in shareholders' equity and cash flows for the years then ended, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 3 to the consolidated financial statements, the Company changed the manner in which it accounts for revenues from contracts with customers in 2018.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants
Ottawa, Canada
February 12, 2019

We have served as the Company's auditor since 2011, which includes periods before the Company became subject to SEC reporting requirements.

Shopify Inc.
Consolidated Balance Sheets
Expressed in US $000's except share amounts

	Note	As at December 31, 2018 $	As at December 31, 2017 $
Assets			
Current assets			
Cash and cash equivalents	*4*	410,683	141,677
Marketable securities	*5*	1,558,987	796,362
Trade and other receivables, net	*6*	41,347	21,939
Merchant cash advances and loans receivable, net	*7*	91,873	47,101
Other current assets	*8*	26,192	18,598
		2,129,082	1,025,677
Long-term assets			
Property and equipment, net	*9*	61,612	50,360
Intangible assets, net	*10*	26,072	17,210
Goodwill	*11*	38,019	20,317
		125,703	87,887
Total assets		2,254,785	1,113,564
Liabilities and shareholders' equity			
Current liabilities			
Accounts payable and accrued liabilities	*12*	96,956	62,576
Current portion of deferred revenue	*13*	39,180	30,694
Current portion of lease incentives	*14*	2,552	1,484
		138,688	94,754
Long-term liabilities			
Deferred revenue	*13*	1,881	1,352
Lease incentives	*14*	22,316	14,970
Deferred tax liability	*20*	1,132	1,388
		25,329	17,710
Commitments and contingencies	*16*		
Shareholders' equity			
Common stock, unlimited Class A subordinate voting shares authorized, 98,081,889 and 87,067,604 issued and outstanding; unlimited Class B multiple voting shares authorized, 12,310,800 and 12,810,084 issued and outstanding	*17*	2,215,936	1,077,477
Additional paid-in capital		74,805	43,392
Accumulated other comprehensive income (loss)	*18*	(12,216)	3,435
Accumulated deficit		(187,757)	(123,204)
Total shareholders' equity		2,090,768	1,001,100
Total liabilities and shareholders' equity		2,254,785	1,113,564

The accompanying notes are an integral part of these consolidated financial statements.

On Behalf of the Board:

"/s/ *Tobias Lütke* "	"/s/ *Steven Collins* "
Tobias Lütke	Steven Collins
Chairman, Board of Directors	Chairman, Audit Committee

Shopify Inc.
Consolidated Statements of Operations and Comprehensive Loss
Expressed in US $000's, except share and per share amounts

		Years ended	
		December 31, 2018	**December 31, 2017**
	Note	**$**	**$**
Revenues			
Subscription solutions	*21*	464,996	310,031
Merchant solutions	*21*	608,233	363,273
		1,073,229	673,304
Cost of revenues			
Subscription solutions		100,990	61,267
Merchant solutions		375,972	231,784
		476,962	293,051
Gross profit		596,267	380,253
Operating expenses			
Sales and marketing		350,069	225,694
Research and development		230,674	135,997
General and administrative		107,444	67,719
Total operating expenses		688,187	429,410
Loss from operations		(91,920)	(49,157)
Other income			
Interest income, net		29,436	7,850
Foreign exchange gain (loss)		(2,069)	1,312
		27,367	9,162
Net loss		(64,553)	(39,995)
Other comprehensive income (loss), net of tax			
Unrealized gain (loss) on cash flow hedges	*18*	(15,651)	5,253
Comprehensive loss		(80,204)	(34,742)
Basic and diluted net loss per share attributable to shareholders	*19*	$ (0.61)	$ (0.42)
Weighted average shares used to compute basic and diluted net loss per share attributable to shareholders	*19*	105,671,839	95,774,897

The accompanying notes are an integral part of these consolidated financial statements.

Shopify Inc.
Statements of Changes in Shareholders' Equity
Expressed in US $000's except share amounts

	Note	Common Stock Shares	Common Stock Amount $	Additional Paid-In Capital $	Accumulated Other Comprehensive Income (Loss) $	Accumulated Deficit $	Total $
As at December 31, 2016		**89,405,480**	**468,494**	**27,009**	**(1,818)**	**(83,209)**	**410,476**
Exercise of stock options		3,322,993	24,959	(10,185)	—	—	14,774
Stock-based compensation		—	—	50,535	—	—	50,535
Vesting of restricted share units		824,215	23,967	(23,967)	—	—	—
Issuance of Class A subordinate voting shares, net of offering costs of $15,518	*17*	6,325,000	560,057	—	—	—	560,057
Net loss and comprehensive loss for the year		—	—	—	5,253	(39,995)	(34,742)
As at December 31, 2017		**99,877,688**	**1,077,477**	**43,392**	**3,435**	**(123,204)**	**1,001,100**
Exercise of stock options		2,179,999	48,408	(17,914)	—	—	30,494
Stock-based compensation		—	—	97,690	—	—	97,690
Vesting of restricted share units		935,002	48,363	(48,363)	—	—	—
Issuance of Class A subordinate voting shares, net of offering costs of $16,312	*17*	7,400,000	1,041,688	—	—	—	1,041,688
Net loss and comprehensive loss for the year		—	—	—	(15,651)	(64,553)	(80,204)
As at December 31, 2018		**110,392,689**	**2,215,936**	**74,805**	**(12,216)**	**(187,757)**	**2,090,768**

The accompanying notes are an integral part of these consolidated financial statements.

Shopify Inc.
Consolidated Statements of Cash Flows
Expressed in US $000's

	Note	Years ended December 31, 2018 $	Years ended December 31, 2017 $
Cash flows from operating activities			
Net loss for the year		(64,553)	(39,995)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Amortization and depreciation		27,052	23,382
Stock-based compensation		95,720	49,163
Provision for uncollectible receivables related to merchant cash advances and loans receivable	*7*	5,922	2,606
Unrealized foreign exchange (gain) loss		1,272	(1,604)
Changes in operating assets and liabilities:			
Trade and other receivables		(32,649)	(13,037)
Merchant cash advances and loans receivable		(50,694)	(37,811)
Other current assets		(10,816)	(3,706)
Accounts payable and accrued liabilities		20,641	15,428
Deferred revenue		9,015	10,960
Lease incentives		8,414	2,515
Net cash provided by operating activities		9,324	7,901
Cash flows from investing activities			
Purchase of marketable securities		(2,447,955)	(1,129,263)
Maturity of marketable securities		1,698,264	642,073
Acquisitions of property and equipment		(27,950)	(20,043)
Acquisitions of intangible assets		(13,595)	(4,219)
Acquisition of businesses, net of cash acquired	*22*	(19,397)	(15,718)
Net cash used by investing activities		(810,633)	(527,170)
Cash flows from financing activities			
Proceeds from the exercise of stock options		30,494	14,774
Proceeds from public offering, net of issuance costs	*17*	1,041,688	560,057
Net cash provided by financing activities		1,072,182	574,831
Effect of foreign exchange on cash and cash equivalents		(1,867)	2,102
Net increase in cash and cash equivalents		269,006	57,664
Cash and cash equivalents – Beginning of Year		141,677	84,013
Cash and cash equivalents – End of Year		410,683	141,677
Non-cash investing activities:			
Acquired property and equipment remaining unpaid		1,931	1,764
Acquired intangible assets remaining unpaid		322	—
Capitalized stock-based compensation		1,970	1,372

The accompanying notes are an integral part of these consolidated financial statements.

1. Nature of Business

Shopify Inc. (“Shopify” or the “Company”) was incorporated as a Canadian corporation on September 28, 2004. The Company’s mission is to make commerce better for everyone. Shopify is the leading cloud-based, multi-channel commerce platform. The Company builds web- and mobile-based software and lets merchants easily set up beautiful online storefronts that are rich with retail functionality. Merchants use the Company's software to run their business across all of their sales channels, including web and mobile storefronts, physical retail locations, social media storefronts, and marketplaces. The Shopify platform provides merchants with a single view of their business and customers across all of their sales channels and enables them to manage products and inventory, process orders and payments, ship orders, build customer relationships, source products, leverage analytics and reporting, and access financing, all from one integrated back office.

The Company’s headquarters and principal place of business are in Ottawa, Canada.

2. Basis of Presentation and Consolidation

These consolidated financial statements include the accounts of the Company and its directly and indirectly wholly owned subsidiaries including, but not limited to: Shopify Payments (Canada) Inc., incorporated in Canada; Shopify International Limited, incorporated in Ireland; Shopify Capital Inc., incorporated in the state of Virginia in the United States; and Shopify LLC, Shopify Payments (USA) Inc. and Shopify Holdings (USA) Inc., incorporated in the state of Delaware in the United States. All intercompany accounts and transactions have been eliminated upon consolidation.

These consolidated financial statements of the Company have been presented in United States dollars (USD) and have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP), including the applicable rules and regulations of the Securities and Exchange Commission (SEC) regarding financial reporting.

3. Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements, in accordance with U.S. GAAP, requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates, judgments and assumptions in these consolidated financial statements include: key judgments related to revenue recognition in determining whether the Company is the principal or an agent to the arrangements with merchants, and the estimated period over which contract costs should be amortized; provision for uncollectible receivables related to merchant cash advances and loans; recoverability of deferred tax assets; and fair value of acquired intangible assets. Actual results may differ from the estimates made by management.

Revenue Recognition

The Company's sources of revenue consist of subscription solutions and merchant solutions. The Company principally generates subscription solutions revenue through the sale of subscriptions to the platform. The Company also generates additional subscription solutions revenues from the sale of themes and apps, the registration of domain names, and the collection of variable platform fees. The Company generates merchant solutions revenue by providing additional services to merchants to increase their use of the platform. The majority of the Company's merchant solutions revenue is from fees earned from merchants based on their customer orders processed through Shopify Payments. The Company also earns merchant solutions revenue relating to Shopify Shipping, Shopify Capital, other transaction services and referral fees, as well as from the sale of Point-of-Sale (POS) hardware. Arrangements with merchants do not provide the merchants with the right to take possession of the software supporting the Company’s hosting platform at any time and are therefore accounted for as service contracts. The Company’s subscription service contracts do not provide for refunds or any other rights of return to merchants in the event of cancellations.

The Company recognizes revenue to depict the transfer of promised services to merchants in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those services by applying the following steps:

- Identify the contract with a merchant;
- Identify the performance obligations in the contract;
- Determine the transaction price;
- Allocate the transaction price; and
- Recognize revenue when, or as, the Company satisfies a performance obligation.

The Company follows the guidance provided in ASC 606-10, Principal versus Agent Considerations, for determining whether the Company should recognize revenue based on the gross amount billed to a merchant or the net amount retained. This determination is a matter of judgment that depends on the facts and circumstances of each arrangement. The Company recognizes revenue from Shopify Shipping and the sales of apps on a net basis as the Company is not primarily responsible for the fulfillment and does not have control of the promised service, and therefore is the agent in the arrangement with merchants. All other revenue is reported on a gross basis, as the Company has determined it is the principal in the arrangement.

Sales taxes collected from merchants and remitted to government authorities are excluded from revenue.

The Company's arrangements with merchants can include multiple services or performance obligations, which may consist of some or all of the Company's subscription solutions. When contracts involve various performance obligations, the Company evaluates whether each performance obligation is distinct and should be accounted for as a separate unit of accounting under Topic 606. In the case of subscription solutions, the Company has determined that merchants can benefit from the service on its own, and that the service being provided to the merchant is separately identifiable from other promises in the contract. Specifically, the Company considers the distinct performance obligations to be the subscription solution, custom themes, feature-enhancing apps and unique domain names. The total transaction price is determined at the inception of the contract and allocated to each performance obligation based on their relative standalone selling prices. In the case of merchant solutions, the transaction price for each performance obligation is based on an observable standalone selling price that is never bundled, therefore the relative allocation is not required.

The Company determined the standalone selling price by considering its overall pricing objectives and market conditions. Significant pricing practices taken into consideration for our subscription solutions include discounting practices, the size and volume of our transactions, the customer demographic, the geographic area where services are sold, price lists, our go-to-market strategy, historical standalone sales and contract prices. The determination of standalone selling prices is made through consultation with and approval by our management, taking into consideration our go-to-market strategy. As the Company's go-to-market strategies evolve, the Company may modify its pricing practices in the future, which could result in changes in relative standalone selling prices.

The Company generally receives payment from its merchants at the time of invoicing. In all other cases, payment terms and conditions vary by contract type, although terms generally include a requirement for payment within 30 days of the invoice date. In instances where timing of revenue recognition differs from the timing of invoicing and subsequent payment, we have determined our contracts generally do not include a significant financing component.

Subscription Solutions

Subscription revenue is recognized over time on a ratable basis over the contractual term. The contract terms are monthly, annual or multi-year subscription terms. Revenue recognition begins on the date that the Company's service is made available to the merchant. Certain subscription contracts have a transaction price that includes a variable component that is based on the merchants' volume of sales. In such cases, the Company uses the practical expedient that allows it to determine the transaction price and recognize revenue in the amount to which the Company has a right to invoice. Payments received in advance of services being rendered are recorded as deferred revenue and recognized ratably over time, over the requisite service period.

Revenue from the sale of separately priced themes and apps is recognized at the time of the sale. The right to use domain names is also sold separately and is recognized ratably over time, over the contractual term, which is generally an annual term. Revenue from themes, as well as apps and domains have been classified within subscription solutions on the basis that they are typically sold at the time the merchant enters into the subscription services arrangement or because they are charged on a recurring basis.

Merchant Solutions

Revenues earned from Shopify Payments, Shopify Shipping, other transaction services, and referral fees are recognized at a point in time, at the time of the transaction. For the sale of POS hardware, revenue is recognized at a point in time, based on when ownership passes to the merchant, in accordance with the shipping terms. The Company earns revenue from Shopify Capital, a merchant cash advance (MCA) and loan program for eligible merchants. The Company evaluates identified underwriting criteria such as, but not limited to, historical sales data prior to purchasing the eligible merchant's future receivables, or making a loan, to help ensure collectibility. Under Shopify Capital, the Company purchases a designated amount of future receivables at a discount or makes a loan, and the merchant remits a fixed percentage of their daily sales to the Company, until the outstanding balance has been fully remitted. For Shopify Capital MCA's, the Company applies a percentage of the remittances collected against the merchant's receivable balance, and a percentage, which is related to the discount, as merchant solutions revenue. For Shopify Capital loans, because there is a fixed maximum repayment term, the Company calculates an effective interest rate based on the merchant's expected future payment volume to determine how much of a merchant's repayment to recognize as revenue and how much to apply against the merchant's receivable balance.

Capitalized Contract Costs

As part of obtaining contracts with certain merchants, the Company incurs upfront costs such as sales commissions. The Company capitalizes these contract costs, which are subsequently amortized on a systematic basis consistent with the pattern of the transfer of the good or service to which the contract asset relates, which is generally on a straight-line basis over the estimated life of the merchant relationship. In some instances, the Company applies the practical expedient that allows it to determine this estimate for a portfolio of contracts that have similar characteristics in terms of type of service, contract term and pricing. This estimate is reviewed by management at the end of each reporting period as additional information becomes available. For certain contracts where the amortization period of the contract costs would have been one year or less, the Company uses the practical expedient that allows it to recognize the incremental costs of obtaining those contracts as an expense when incurred and not consider the time value of money.

Cost of Revenues

The Company's cost of revenues consists of payments for Themes and Domain registration, credit card fees, third-party infrastructure and hosting costs, an allocation of costs incurred by both the operations and support functions, and amortization of capitalized software development costs. In addition, included in the cost of merchant solutions are costs associated with credit card processing, and the cost of POS hardware.

Software Development Costs

Research and development costs are generally expensed as incurred. These costs primarily consist of personnel and related expenses, contractor and consultant fees, stock-based compensation, and corporate overhead allocations, including depreciation.

The Company capitalizes certain development costs incurred in connection with its internal use software. These capitalized costs are related to the development of its software platform that is hosted by the Company and accessed by its merchants on a subscription basis as well as material internal infrastructure software. Costs incurred in the preliminary stages of development are expensed as incurred. The Company capitalizes all direct and incremental costs incurred during the application development phase, until such time when the software is substantially complete and ready for its intended use. Capitalization ceases upon completion of all substantial testing.

The Company also capitalizes costs related to specific upgrades and enhancements when it is probable the expenditures will result in additional features and functionality. Capitalized costs are recorded as part of intangible assets in the consolidated balance sheets and are amortized on a straight-line basis over their estimated useful lives of two or three years. Maintenance costs are expensed as incurred.

Advertising Costs

Advertising costs are expensed as incurred. Advertising costs included in sales and marketing expenses during the years ended December 31, 2018 and 2017 were $ 131,434 and $ 92,031 respectively.

Operating Leases

The total payments and costs associated with operating leases, including leases that contain lease inducements and uneven payments, are aggregated and amortized on a straight-line basis over the expected lease term of each respective agreement.

Stock-Based Compensation

The accounting for stock-based awards is based on the fair value of the award measured at the grant date. Accordingly, stock-based compensation cost is recognized in the Consolidated Statements of Operations and Comprehensive Loss as an operating expense over the requisite service period.

The fair value of stock options is determined using the Black-Scholes option-pricing model, single option approach. An estimate of forfeitures is applied when determining compensation expense. The Company determines the fair value of stock option awards on the date of grant using assumptions regarding expected term, share price volatility over the expected term of the awards, risk-free interest rate, and dividend rate. All shares issued under the Company's Fourth Amended and Restated Stock Option Plan (Legacy Option Plan), the Amended and Restated Stock Option Plan (Stock Option Plan), and the Amended and Restated Long Term Incentive Plan (Long Term Incentive Plan) are from treasury.

The fair value of restricted share units (RSUs) is measured using the fair value of the Company's shares as if the RSUs were vested and issued on the grant date. An estimate of forfeitures is applied when determining compensation expense. All shares issued under the Company's Long Term Incentive Plan (LTIP) are from treasury.

Income Taxes

Deferred tax assets and liabilities are determined based on the difference between the financial statement carrying amounts and the tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts that are more likely than not to be realized.

The Company evaluates tax positions taken or expected to be taken in the course of preparing tax returns to determine whether the tax positions have met a "more-likely-than-not" threshold of being sustained by the applicable tax authority. Tax benefits related to tax positions not deemed to meet the "more-likely-than-not" threshold are not permitted to be recognized in the consolidated financial statements.

Earnings Per Share

Basic earnings per share are calculated by dividing net earnings attributable to common equity holders of the Company by the weighted average number of shares of common stock outstanding during the year.

Diluted earnings per share are calculated by dividing net earnings attributable to common equity holders of the Company by the weighted average number of shares of common stock outstanding during the year, plus the effect of dilutive potential common stock outstanding during the year. This method requires that diluted earnings per share be calculated (using the treasury stock method) as if all dilutive potential common stock had been exercised at the latest of the beginning of the year or on the date of issuance, as the case may be, and that the funds obtained thereby (plus an amount equivalent to the unamortized portion of related stock-based compensation costs) be used to purchase common stock of the Company at the average fair value of the common stock during the year.

Foreign Currency Transactions

The functional and reporting currency of the Company and its subsidiaries is the USD. Monetary assets and liabilities denominated in foreign currencies are re-measured to USD using the exchange rates at the consolidated balance sheet dates. Non-monetary assets and liabilities denominated in foreign currencies are measured in USD using historical exchange rates. Revenues and expenses are measured using the actual exchange rates prevailing on the dates of the transactions. Gains and losses resulting from re-measurement are recorded in the Company's Consolidated Statements of Operations and Comprehensive Loss as Foreign exchange gain (loss), with the exception of foreign exchange forward contracts used for hedging which are re-measured in Other Comprehensive Income (Loss) and the gain (loss) is then reclassified into earnings to either cost of revenue or operating expenses in the same period, or period, during which the hedged transaction affects earnings.

Cash and Cash Equivalents

The Company considers all short term highly liquid investments purchased with original maturities at their acquisition date of three months or less to be cash equivalents.

Marketable Securities

The Company's marketable securities consist of U.S. and Canadian federal agency bonds, U.S. term deposits, corporate bonds and money market funds, and mature within 12 months from the date of purchase. Marketable securities are classified as held-to-maturity at the time of purchase and this classification is re-evaluated as of each consolidated balance sheet date. Held-to-maturity securities represent those securities that the Company has both the intent and ability to hold to maturity and are carried at amortized cost, which approximates their fair market value. Interest on these securities, as well as amortization/accretion of premiums/discounts, are included in interest income. All investments are assessed as to whether any unrealized loss positions are other than temporarily impaired. Impairments are considered other than temporary if they are related to deterioration in credit risk or if it is likely the Company will sell the securities before the recovery of their cost basis. Realized gains and losses and declines in value determined to be other than temporary are determined based on the specific identification method and are reported in other income (expense) in the Consolidated Statements of Operations and Comprehensive Loss.

Fair Value Measurements

The carrying amounts for cash and cash equivalents, marketable securities, trade and other receivables, merchant cash advances receivable, loans, foreign exchange contracts, trade accounts payable and accruals, and employee related accruals approximate fair value due to the short-term maturities of these instruments.

The Company measures the fair value of its financial assets and liabilities using a fair value hierarchy. A financial instrument's classification within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Three levels of inputs may be used to measure fair value.

Level 1: Quoted prices in active markets for identical assets or liabilities.

Level 2: Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

Derivatives and Hedging

The majority of the Company's derivative products are foreign exchange forward contracts, which are designated as cash flow hedges of foreign currency forecasted expenses. By their nature, derivative financial instruments involve risk, including the credit risk of non-performance by counter parties. The Company may hold foreign exchange forward contracts to mitigate the risk of future foreign exchange rate volatility related to future Canadian dollar (CAD) denominated costs and current and future obligations.

The Company's foreign currency forward contracts generally have maturities of twelve months or less. The critical terms match method is used when the key terms of the hedging instrument and that of the hedged item are aligned; therefore, the changes in fair value of the forward contracts are recorded in accumulated other comprehensive income (AOCI). The effective portion of the gain or loss on each forward contract is reported as a component of AOCI and reclassified into earnings to either cost of revenue or operating expense in the same period, or periods, during which the hedged transaction affects earnings. The ineffective portion of the gains or losses, if any, is recorded immediately in other income (expense).

For hedges that do not qualify for the critical terms match method of accounting, a formal assessment is performed to verify that derivatives used in hedging transactions continue to be highly effective in offsetting the changes in fair value or cash flows of the hedged item. Hedge accounting is discontinued if a derivative ceases to be highly effective, matures, is terminated or sold, if a hedged forecasted transaction is no longer probable of occurring, or if the Company removes the derivative's hedge designation. For discontinued cash flow hedges, the accumulated gain or loss on the derivative remains in AOCI and is reclassified into earnings in the period in which the previously hedged forecasted transaction impacts earnings or is no longer probable of occurring.

In addition, the Company has a master netting agreement with each of the Company's counterparties, which permits net settlement of multiple, separate derivative contracts with a single payment. The Company presents its derivative instruments on a net basis in the consolidated financial statements.

Provision for Uncollectible Receivables Related to Merchant Cash Advances and Loans

Merchant cash advance receivables and loans represent the aggregate amount of Shopify Capital related receivables owed by merchants as of the consolidated balance sheet date, net of an allowance for uncollectible amounts. The Company estimates the allowance based on an assessment of various factors, including historical trends, merchants' gross merchandise volume, and other factors that may affect the merchants' ability to make future payments on the receivables. Additions to the allowance are reflected in current operating results, while charges against the allowance are made when losses are incurred. These additions are classified within general and administrative expenses on the Consolidated Statements of Operations and Comprehensive Loss. Recoveries are reflected as a reduction in the allowance for uncollectible receivables related to merchant cash advances and loans when the recovery occurs.

Property and Equipment

Property and equipment is stated at cost, less accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the related assets. Computer equipment is depreciated over the shorter of three years or their estimated useful lives while office furniture and equipment are depreciated over four years. Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the term of their associated leases, which range from three to fifteen years.

The carrying values of property and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amounts of such assets may not be recoverable. The determination of whether any impairment exists includes a comparison of estimated undiscounted future cash flows anticipated to be generated over the remaining life of the asset to the net carrying value of the asset. If the estimated undiscounted future cash flows associated with the asset are less than the carrying value, an impairment loss will be recorded based on the estimated fair value.

Intangible Assets

Intangible assets are stated at cost, less accumulated amortization. Amortization is calculated using the straight-line method over the estimated useful lives of the related assets. Purchased software, acquired technology, acquired customer relationships, and capitalized software development costs are amortized into cost of revenues and operating expenses over a two or three year period, depending on the nature of the asset.

The carrying values of intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amounts of such assets may not be recoverable. The determination of whether any impairment exists includes a comparison of estimated undiscounted future cash flows anticipated to be generated over the remaining life of the asset to the net carrying value of the asset. If the estimated undiscounted future cash flows associated with the asset are less than the carrying value, an impairment loss will be recorded based on the estimated fair value.

Goodwill

Goodwill represents the excess of the purchase price over the estimated fair value of net assets of a business acquired in a business combination. Goodwill is not amortized, but instead tested for impairment at least annually. Should certain events or indicators of impairment occur between annual impairment tests, the Company will perform the impairment test as those events or indicators occur. Examples of such events or circumstances include the following: a significant decline in the Company's expected future cash flows; a sustained, significant decline in the Company's fair value; a significant adverse change in the business climate; and slower growth rates.

Goodwill is tested for impairment at the reporting unit level by first performing a qualitative assessment to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying value. The qualitative assessment considers the following factors: macroeconomic conditions, industry and market considerations, cost factors, overall company financial performance, events affecting the reporting unit, and changes in the Company's fair value. If the reporting unit does not pass the qualitative assessment, the Company carries out a quantitative test for impairment of goodwill. This is done by comparing the fair value of the reporting unit with the carrying value of its net assets. If the fair value of the reporting unit is greater than its carrying value, no impairment results. If the fair value of the reporting unit is less than its carrying value, an impairment loss would be recognized in the Consolidated Statements of Operations and Comprehensive Loss in an amount equal to that difference, limited to the total amount of goodwill allocated to that reporting unit. The Company has one reporting unit and evaluates goodwill for impairment at the entity level.

Business Combinations

The Company follows the acquisition method to account for business combinations in accordance with ASC 805, Business Combinations. The acquisition method of accounting requires that assets acquired and liabilities assumed be recorded at their estimated fair values on the date of a business acquisition. The excess of the purchase price over the estimated fair value is recorded as goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments would be recorded in the consolidated statements of operations and comprehensive loss.

Segment Information

The Company's chief operating decision maker (CODM) is a function comprised of two executives, specifically the Chief Executive Officer and the Chief Financial Officer. The CODM is the highest level of management responsible for assessing Shopify's overall performance, and making operational decisions such as resource allocations related to operations, product prioritization, and delegations of authority. Management has determined that the Company operates in a single operating and reportable segment.

Concentration of Credit Risk

The Company's cash and cash equivalents, marketable securities, trade and other receivables, merchant cash advances and loans receivable, and foreign exchange derivative products subject the Company to concentrations of credit risk. Management mitigates this risk associated with cash and cash equivalents by making deposits and entering into foreign exchange derivative products only with large banks and financial institutions that are considered to be highly credit worthy. Management mitigates the risks associated with marketable securities by adhering to its investment policy, which stipulates minimum rating requirements, maximum investment exposures and maximum maturities. Due to the Company's diversified merchant base, there is no particular concentration of credit risk related to the Company's trade and other receivables and merchant cash advances and loans receivable. Trade and other receivables and merchant cash advances and loans receivable are monitored on an ongoing basis to ensure timely collection of amounts. The Company has mitigated some of the risks associated with Shopify Capital by entering into an agreement with a third party to insure merchant cash advances offered by Shopify Capital. There are no receivables from individual merchants accounting for 10% or more of revenues or receivables.

Interest Rate Risk

Certain of the Company's cash, cash equivalents and marketable securities earn interest. The Company's trade and other receivables, accounts payable and accrued liabilities and lease liabilities do not bear interest. The Company is not exposed to material interest rate risk.

Foreign Exchange Risk

The Company's exposure to foreign exchange risk is primarily related to fluctuations between the CAD and the USD. The Company is exposed to foreign exchange fluctuations on the revaluation of foreign currency assets and liabilities. The Company uses foreign exchange derivative products to manage the impact of foreign exchange fluctuations. By their nature, derivative financial instruments involve risk, including the credit risk of non-performance by counter parties.

While the majority of the Company's revenues and cost of revenues are denominated in USD, a significant portion of operating expenses are incurred in CAD. As a result, earnings are adversely affected by an increase in the value of the CAD relative to the USD.

The following table summarizes the effects on revenues, cost of revenues, operating expenses, and loss from operations of a 10% strengthening [1] of the CAD versus the USD without considering the impact of the Company's hedging activities and without factoring in any potential changes in demand for the Company's solutions as a result of changes in the CAD to USD exchange rates:

	Years ended					
	December 31, 2018			December 31, 2017		
	GAAP Amounts As Reported $	Exchange Rate Effect [2] $	At 10% Stronger CAD Rate [3] $	GAAP Amounts As Reported $	Exchange Rate Effect [2] $	At 10% Stronger CAD Rate [3] $
	(in thousands)					
Revenues	$ 1,073,229	$ 1,857	$ 1,075,086	$ 673,304	$ 1,104	$ 674,408
Cost of revenues	(476,962)	(3,302)	(480,264)	(293,051)	(2,131)	(295,182)
Operating expenses	(688,187)	(30,275)	(718,462)	(429,410)	(19,068)	(448,478)
Loss from operations	$ (91,920)	$ (31,720)	$ (123,640)	$ (49,157)	$ (20,095)	$ (69,252)

(1) A 10% weakening of the CAD versus the USD would have an equal and opposite impact on our revenues, cost of revenues, operating expenses and loss from operations as presented in the table.

(2) Represents the increase or decrease in GAAP amounts reported resulting from a 10% strengthening in the CAD-USD foreign exchange rates.

(3) Represents the outcome that would have resulted had the CAD-USD rates in those periods been 10% stronger than they actually were, excluding the impact of our hedging program and without factoring in any potential changes in demand for the Company's solutions as a result of changes in the CAD-USD exchange rates.

Accounting Pronouncements Adopted in the Year

In May 2014, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers. The new accounting standards update requires an entity to apply a five step model to recognize revenue to depict the transfer of promised goods and services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, as well as a cohesive set of disclosure requirements that would result in an entity providing comprehensive information about the nature, timing, and uncertainty of revenue and cash flows arising from an entity’s contracts with customers. In March 2016, the Financial Accounting Standards Board issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606), Principal versus Agent Considerations (Reporting Revenue Gross versus Net), updating the implementation guidance on principal versus agent considerations in the new revenue recognition standard. This update clarifies that an entity is a principal if it controls the specified good or service before that good or service is transferred to a customer. The update also includes indicators to assist an entity in determining whether it controls a specified good or service before it is transferred to the customer. In May 2016, the FASB issued ASU 2016-12, Narrow-Scope Improvements and Practical Expedients, which provides clarification on how to assess collectibility, present sales taxes, treat non-cash consideration, and account for completed and modified contracts at the time of transition. ASU 2016-12 also clarifies that an entity retrospectively applying the guidance in Topic 606 is not required to disclose the effect of the accounting change in the period of adoption.

The Company adopted this new revenue standard effective January 1, 2018, using the full retrospective method. There was no impact on previously reported results.

The most significant impact of adoption of the new revenue standard in the current year relates to the Company's accounting for incremental costs of obtaining a contract. Specifically, the Company is required to recognize as an asset the incremental sales commission costs of obtaining a contract with a merchant, if the Company expects to recover these costs. The contract assets are subsequently amortized on a systematic basis consistent with the pattern of the transfer of the good or service to which the asset relates to, which in the Company's case, is on a straight-line basis over the estimated life of the related merchant relationship. The adoption of the new revenue standard did not have an impact on the timing and amount of revenue recognition, or on cash from or used in operating, investing, or financing activities.

In January 2017, the Financial Accounting Standards Board issued ASU No. 2017-04, Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment, which simplifies the subsequent measurement of goodwill and eliminates Step 2 from the goodwill impairment test. The standard is effective for annual periods beginning after December 15, 2019 but the Company opted for early adoption for the goodwill impairment test that was completed as of September 30, 2018. The adoption of this standard did not have an impact on the Company's annual goodwill impairment test because the estimated fair value of the reporting unit was greater than its carrying amount.

Recent Accounting Pronouncements Not Yet Adopted

In February 2016, the Financial Accounting Standards Board issued ASU No. 2016-02, Leases, which requires a lessee to record a right-of-use asset and a corresponding lease liability, initially measured at the present value of the lease payments, on the balance sheet for all leases with terms longer than 12 months, as well as the disclosure of key information about leasing arrangements. The standard requires recognition in the statement of operations of a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. This standard also requires classification of all cash payments within operating activities in the statement of cash flows. In July 2018, the Financial Accounting Standards Board issued ASU No. 2018-11, Leases - Targeted Improvements, which provides an additional transition method. The Company will adopt the standard effective January 1, 2019 using a modified retrospective approach and applying the transition method that does not require adjustments to comparative periods nor require modified disclosures in the comparative periods. The Company will elect the package of practical expedients to not reassess whether a contract is or contains a lease, lease classification and initial direct costs for contracts that expired or existed prior to the effective date. As the lessee to material operating leases, the standard will have a material impact on the Company's consolidated balance sheets, but will not have an impact on its consolidated statements of operations. While the adoption remains in progress, the Company expects that the most significant impact will be the recognition of right-of-use assets and lease liabilities for the Company's operating leases. The Company has completed its process to identify the population of lease arrangements and it is nearing the completion of applying the new leasing standard to each arrangement. The Company has also determined the incremental borrowing rate for each arrangement.

In June 2016, the Financial Accounting Standards Board issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, which will replace the incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates on loans, trade and other receivables, held-to-maturity debt securities, and other instruments. The update is effective for annual periods beginning after December 15, 2019 including interim periods within those periods. Early adoption is permitted. The Company is currently assessing the impact of this new standard.

In August 2018, the Financial Accounting Standards Board issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract, which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The update is effective for annual periods beginning after December 15, 2019 including interim periods within those periods and can be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. Early adoption is permitted. The Company does not expect the adoption of this standard to have a material impact on its consolidated financial statements.

Expressed in US $000's except share and per share amounts

4. Cash and Cash Equivalents

As at December 31, 2018 and 2017 , the Company's cash and cash equivalents balance was $ 410,683 and $ 141,677 , respectively. These balances included $292,290 and $61,263 , respectively, of money market funds, repurchase agreements and commercial paper.

5. Financial Instruments

As at December 31, 2018 , the carrying amount and fair value of the Company's financial instruments were as follows:

	Level 1 $		**Level 2 $**		**Level 3 $**	
	Carrying Amount	**Fair Value**	**Carrying Amount**	**Fair Value**	**Carrying Amount**	**Fair Value**
Assets:						
Cash equivalents:						
Commercial paper	—	—	4,994	4,994	—	—
Repurchase agreements	—	—	60,000	60,005	—	—
Marketable securities:						
U.S. term deposits	127,500	128,241	—	—	—	—
U.S. federal bonds	230,898	231,299	—	—	—	—
Canadian federal bonds	19,967	19,962	—	—	—	—
Corporate bonds and commercial paper	—	—	1,180,622	1,182,437	—	—
Liabilities:						
Derivative liabilities:						
Foreign exchange forward contracts	—	—	12,216	12,216	—	—

The fair values above include accrued interest of $5,109 , which is excluded from the carrying amounts. The accrued interest is included in Trade and other receivables in the Consolidated Balance Sheets.

Expressed in US $000's except share and per share amounts

As at December 31, 2017 , the carrying amount and fair value of the Company’s financial instruments were as follows:

	Level 1 $		Level 2 $		Level 3 $	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Assets:						
Cash equivalents:						
Corporate bonds and commercial paper	—	—	9,965	9,965	—	—
Marketable securities:						
U.S. term deposits	65,000	65,284	—	—	—	—
U.S. federal bonds	119,074	119,057	—	—	—	—
Canadian federal bonds	19,945	19,940	—	—	—	—
Corporate bonds and commercial paper	—	—	592,343	593,554	—	—
Derivative assets:						
Foreign exchange forward contracts	—	—	4,503	4,503	—	—
Liabilities:						
Derivative liabilities:						
Foreign exchange forward contracts	—	—	795	795	—	—

The fair values above include accrued interest of $2,015 , which is excluded from the carrying amounts. The accrued interest is included in Trade and other receivables in the Consolidated Balance Sheets.

All cash equivalents and marketable securities mature within one year of the consolidated balance sheet date.

As at December 31, 2018 the Company held foreign exchange forward contracts to convert USD into CAD, with a total notional value of $276,696 (December 31, 2017 - $182,464), to fund a portion of its operations. The foreign exchange forward contracts have maturities of twelve months or less. The fair value of foreign exchange forward contracts and corporate bonds was based upon Level 2 inputs, which included period-end mid-market quotations for each underlying contract as calculated by the financial institution with which the Company has transacted. The quotations are based on bid/ask quotations and represent the discounted future settlement amounts based on current market rates. There were no transfers between Levels 1, 2 and 3 during the years ended December 31, 2018 and December 31, 2017 .

Derivative Instruments and Hedging

The Company has a hedging program to mitigate the impact of foreign currency fluctuations on future cash flows and earnings. Under this program the Company has entered into foreign exchange forward contracts with certain financial institutions and designated those hedges as cash flow hedges. As of December 31, 2018 , $12,216 of unrealized losses related to changes in the fair value of foreign exchange forward contracts designated as cash flow hedges were included in accumulated other comprehensive loss and current liabilities, on the consolidated balance sheet. This amount is expected to be reclassified into earnings over the next twelve months. In the year ended December 31, 2018 , $4,170 of realized losses (December 31, 2017 - realized gains of $3,398) related to the maturity of foreign exchange forward contracts designated as cash flow hedges were included in operating expenses. Under the current hedging program, the Company is hedging cash flows associated with payroll and facility costs.

Expressed in US $000's except share and per share amounts

6. Trade and Other Receivables

	December 31, 2018 $	December 31, 2017 $	December 31, 2016 $
Unbilled revenues	12,653	7,616	2,293
Trade receivables	11,191	7,073	2,818
Accrued interest	5,109	2,015	896
Leasehold incentives receivable	4,411	1,607	1,452
Other receivables	7,983	3,628	2,140
	41,347	21,939	9,599

Unbilled revenues represent amounts not yet billed to merchants related to subscription fees for Plus merchants, transaction fees and shipping charges, as at the Consolidated Balance Sheet date.

The allowance for doubtful accounts reflects our best estimate of probable losses inherent in our unbilled revenues and trade receivables accounts. The Company determined the allowance based on historical experience and other currently available evidence. Activity in the allowance for doubtful accounts was as follows:

	Years ended	
	December 31, 2018 $	December 31, 2017 $
Balance, beginning of the year	1,642	113
Provision for uncollectible receivables	1,355	1,529
Write-offs	(1,974)	—
Balance, end of the year	1,023	1,642

7. Merchant Cash Advances and Loans Receivable

	December 31, 2018 $	December 31, 2017 $	December 31, 2016 $
Merchant cash advances and loans receivable, gross	94,612	49,143	12,924
Allowance for uncollectible merchant cash advances and loans receivable	(2,739)	(2,042)	(1,028)
Merchant cash advances and loans receivable, net	91,873	47,101	11,896

The following table summarizes the activities of the Company's allowance for uncollectible merchant cash advances and loans receivable:

	Years ended	
	December 31, 2018 $	December 31, 2017 $
Balance, beginning of the year	2,042	1,028
Provision for uncollectible merchant cash advances and loans receivable	5,922	2,606
Merchant cash advances and loans receivable charged off, net of recoveries	(5,225)	(1,592)
Balance, end of the year	2,739	2,042

Expressed in US $000's except share and per share amounts

8. Other Current Assets

	December 31, 2018 $	December 31, 2017 $
Prepaid expenses	12,912	7,239
Deposits	9,599	5,240
Other current assets	3,681	1,616
Foreign exchange contracts	—	4,503
	26,192	18,598

9. Property and Equipment

	December 31, 2018		
	Cost $	Accumulated depreciation $	Net book value $
Leasehold improvements	63,402	16,498	46,904
Computer equipment	14,293	7,540	6,753
Office furniture and equipment	14,092	6,137	7,955
	91,787	30,175	61,612

In the year ended December 31, 2018 , the Company retired and disposed of computer equipment with an original cost of $26,201 . There was no gain or loss recognized in the Consolidated Statements of Operations and Comprehensive Loss as a result of the disposal of these assets.

	December 31, 2017		
	Cost $	Accumulated depreciation $	Net book value $
Leasehold improvements	43,058	10,541	32,517
Computer equipment	34,644	20,592	14,052
Office furniture and equipment	7,660	3,869	3,791
	85,362	35,002	50,360

The following table illustrates the classification of depreciation in the Consolidated Statements of Operations and Comprehensive Loss:

	Years ended	
	December 31, 2018 $	December 31, 2017 $
Cost of revenues	5,950	8,055
Sales and marketing	4,087	2,405
Research and development	4,900	4,654
General and administrative	1,968	1,466
	16,905	16,580

Expressed in US $000's except share and per share amounts

10. Intangible Assets

	December 31, 2018		
	Cost $	Accumulated amortization $	Net book value $
Software development costs	24,963	9,226	15,737
Acquired technology and customer relationships	16,051	8,221	7,830
Purchased software	6,973	4,503	2,470
Domain names	591	556	35
	48,578	22,506	26,072

	December 31, 2017		
	Cost $	Accumulated amortization $	Net book value $
Software development costs	12,297	5,394	6,903
Acquired technology and customer relationships	12,935	3,382	9,553
Purchased software	3,752	3,080	672
Domain names	591	509	82
	29,575	12,365	17,210

Internal software development costs of $12,666 and $5,547 were capitalized during the years ended December 31, 2018 and 2017 , respectively, and are classified within software development costs as an intangible asset. Amortization expense related to the capitalized internally developed software was $3,832 and $2,837 for the years ended December 31, 2018 and 2017 , respectively, and is included in cost of revenues and general and administrative expenses in the accompanying Consolidated Statements of Operations and Comprehensive Loss.

The following table illustrates the classification of amortization expense related to intangible assets in the Consolidated Statements of Operations and Comprehensive Loss:

	Years ended	
	December 31, 2018 $	December 31, 2017 $
Cost of revenues	9,720	5,983
Sales and marketing	252	312
Research and development	60	299
General and administrative	109	208
	10,141	6,802

Expressed in US $000's except share and per share amounts

Estimated future amortization expense related to intangible assets, as at December 31, 2018 is as follows:

Fiscal Year	Amount $
2019	13,296
2020	9,508
2021	3,053
2022	215
Total	26,072

11. Goodwill

In the year ended December 31, 2018 , the Company acquired Solutions Alveo Inc. and Tictail, Inc. resulting in additions to goodwill of $2,577 and $15,125 , respectively. The remainder of the Company's goodwill relates to previous acquisitions of various companies including, but not limited to, Oberlo UAB, which was acquired on April 28, 2017. Goodwill is attributable to the Company's single reporting unit.

The Company completed its annual impairment test of goodwill as of September 30, 2018. The Company exercised its option to bypass the qualitative assessment pursuant to ASC 350, Intangibles - Goodwill and Other, and perform a quantitative analysis. The Company determined that the consolidated business is represented by a single reporting unit and concluded that the estimated fair value of the reporting unit, determined using market capitalization, was greater than its carrying amount.

No goodwill impairment was recognized in the years ended December 31, 2018 or December 31, 2017 .

The gross changes in the carrying amount of goodwill as of December 31, 2018 and December 31, 2017 are as follows:

	December 31, 2018 $	December 31, 2017 $
Balance, beginning of the year	20,317	15,504
Acquisition of Tictail, Inc.	15,125	—
Acquisition of Solutions Alveo Inc.	2,577	—
Acquisition of Oberlo UAB	—	4,813
Balance, end of the year	38,019	20,317

12. Accounts Payable and Accrued Liabilities

	December 31, 2018 $	December 31, 2017 $
Trade accounts payable and trade accruals	61,271	44,333
Employee related accruals	14,321	10,610
Foreign exchange forward contracts	12,216	795
Other payables and accruals	9,148	6,838
	96,956	62,576

Expressed in US $000's except share and per share amounts

13. Deferred Revenue

	Years ended	
	December 31, 2018 **$**	**December 31, 2017** **$**
Balance, beginning of the year	32,046	21,086
Deferral of revenue	37,563	29,111
Recognition of deferred revenue	(28,548)	(18,151)
Balance, end of the year	41,061	32,046

	December 31, 2018 **$**	**December 31, 2017** **$**
Current portion	39,180	30,694
Long term portion	1,881	1,352
	41,061	32,046

The opening balances of current and long-term deferred revenue were $20,164 and $922 , respectively, as of January 1, 2017.

14. Lease Incentives

The Company leases space for its offices. The Company's principal lease is for its head office, which is located at 150 Elgin Street in Ottawa, Canada. This lease covers a period of twelve years, ten months that began on March 1, 2014. The lease includes an option to renew for a further five years . The Company received leasehold incentives in the form of rent-free periods and fit-up allowances. The lease agreement also includes scheduled rent increases that are not dependent on future events and therefore the lease payments are being accounted for on a straight-line basis over the expected term of the lease.

The Company also maintains other offices in Canada, the United States, Germany, Lithuania, Sweden, and China. In most of these locations, the Company received leasehold incentives in the form of rent-free periods and fit-up allowances. The lease agreements also include scheduled rent increases that are not dependent on future events and therefore the lease payments are being accounted for on a straight-line basis over the expected term of the lease.

The following table represents the details of the Company's lease incentives balance as of December 31, 2018 and 2017 :

	December 31, 2018 **$**	**December 31, 2017** **$**
Current portion	2,552	1,484
Long term portion	22,316	14,970
	24,868	16,454

15. Credit Facility

The Company has a revolving credit facility with Royal Bank of Canada for $8,000 CAD. The credit facility bears interest at the Royal Bank Prime Rate plus 0.30% . As at December 31, 2018 the effective rate was 4.25% , and no cash amounts have been drawn under this credit facility.

Expressed in US $000's except share and per share amounts

16. Commitments and Contingencies

Operating Leases and Unconditional Purchase Obligations

The Company has entered into various non-cancellable operating leases for certain offices with contractual lease periods expiring between 2019 and 2037. Rent expense was $22,123 and $11,744 for the years ended December 31, 2018 and 2017 , respectively. The Company has also entered into agreements where it commits to certain usage levels related to outsourced hosting.

Amounts of minimum future annual payments under non-cancellable operating leases and purchase obligations in each of the next five years and thereafter as at December 31, 2018 are as follows:

Fiscal Year	**Amount $**
2019	43,972
2020	58,555
2021	47,443
2022	34,378
2023	38,788
Thereafter	346,367
Total future minimum payments	569,503

Litigation and Loss Contingencies

The Company records accruals for loss contingencies when losses are probable and reasonably estimable. From time to time, the Company may become a party to litigation and subject to claims incidental to the ordinary course of business, including intellectual property claims, labour and employment claims and threatened claims, breach of contract claims, tax and other matters. The Company currently has no material pending litigation or claims. The Company is not aware of any litigation matters or loss contingencies that would be expected to have a material adverse effect on the business, consolidated financial position, results of operations, or cash flows.

17. Shareholders' Equity

Public Offerings

In December 2018, the Company completed a public offering in which it issued and sold 2,600,000 Class A subordinate voting shares at a public offering price of $154.00 per share. The Company received total net proceeds of $394,704 after deducting offering fees and expenses of $5,696 .

In February 2018, the Company completed a public offering in which it issued and sold 4,800,000 Class A subordinate voting shares at a public offering price of $137.00 per share. The Company received total net proceeds of $646,984 after deducting offering fees and expenses of $10,616 .

In May 2017, the Company completed a public offering in which it issued and sold 5,500,000 Class A subordinate voting shares at a public offering price of $91.00 per share. Subsequently, in June 2017, the Company issued and sold 825,000 Class A subordinate voting shares at the same price as a result of the underwriters' exercise of their over-allotment option. The Company received total net proceeds of $560,057 after deducting underwriting discounts and commissions of $14,390 and other offering expenses of $1,128 .

Common Stock Authorized

The Company is authorized to issue an unlimited number of Class A subordinate voting shares and an unlimited number of Class B multiple voting shares. The Class A subordinate voting shares have one vote per share and the Class B multiple voting shares have 10 votes per share. The Class B multiple voting shares are convertible into Class A subordinate voting shares on a one -for-one basis at the option of the holder. Class B multiple voting shares will automatically convert into Class A subordinate voting shares in certain other circumstances.

Preferred Shares

The Company is authorized to issue an unlimited number of preferred shares issuable in series. Each series of preferred shares shall consist of such number of shares and having such rights, privileges, restrictions and conditions as may be determined by the Company's Board of Directors prior to the issuance thereof. Holders of preferred shares, except as otherwise provided in the terms specific to a series of preferred shares or as required by law, will not be entitled to vote at meetings of holders of shares.

Stock-Based Compensation

In 2008, the Board of Directors adopted and the Company's shareholders approved the Legacy Stock Option Plan ("the Legacy Option Plan"). Immediately prior to the completion of the Company's May 2015 IPO, and in connection with the closing of the offering, each option outstanding under the Legacy Option Plan became exercisable for one Class B multiple voting share. Following the closing of the Company's IPO, no further awards were made under the Legacy Option Plan. The Legacy Option Plan continues to govern awards granted thereunder.

The Company's Board of Directors and shareholders approved a stock option plan ("Stock Option Plan"), as well as a Long Term Incentive Plan ("LTIP"), each of which became effective upon the closing of the Company's IPO on May 27, 2015. On May 30, 2018, the Company's Board of Directors and shareholders amended both the Stock Option Plan and the LTIP.

The Stock Option Plan allows for the grant of options to the Company's officers, directors, employees and consultants. All options granted under the Stock Option Plan will have an exercise price determined and approved by the Company's Board of Directors at the time of grant, which shall not be less than the market price of the Class A subordinate voting shares at such time. For purposes of the Stock Option Plan, the market price of the Class A subordinate voting shares shall be the volume weighted average trading price of the Class A subordinate voting shares on the NYSE for the five trading days ending on the last trading day before the day on which the option is granted. Options granted under the Stock Option Plan are exercisable for Class A subordinate voting shares. Both the vesting period and term of the options in the Stock Option Plan are determined by the Board of Directors at the time of grant. The majority of grants outstanding under both the Stock Option Plan and the Legacy Option Plan have been approved with a four year vesting schedule with 25% vesting after one year and the remainder vesting evenly over the remaining 36 months. Options granted under the Stock Option Plan since November 2017 have been approved with a three year vesting schedule with 1/3 vesting after one year and the remainder vesting evenly over the remaining 24 months.

The LTIP provides for the grant of share units, or LTIP Units, consisting of RSUs, performance share units (PSUs), and deferred share units (DSUs). Each LTIP Unit represents the right to receive one Class A subordinate voting share in accordance with the terms of the LTIP. Unless otherwise approved by the Board of Directors, RSUs will vest as to 1/3 each on the first, second and third anniversary dates of the date of grant. Prior to November 2017 all RSU grants were approved with a four year vesting schedule with 25% vesting after one year and the remainder vesting evenly over the remaining 36 months. RSUs granted since November 2017 have been approved with a three year vesting schedule with 1/3 vesting after one year and the remainder vesting evenly over the remaining 24 months. A PSU participant's grant agreement will describe the performance criteria established by the Company's Board of Directors that must be achieved for PSUs to vest to the PSU participant, provided the participant is continuously employed by or in the Company's service or the service or employment of any of the Company's affiliates from the date of grant until such PSU vesting date. DSUs will be granted solely to directors of the Company, at their option, in lieu of their Board retainer fees. DSUs will vest upon a director ceasing to act as a director. As at the Consolidated Balance Sheet date there have been nil PSUs granted.

Expressed in US $000's except share and per share amounts

The maximum number of Class A subordinate voting shares reserved for issuance, in the aggregate, under the Company's Stock Option Plan and the LTIP was initially equal to 3,743,692 Class A subordinate voting shares. The number of Class A subordinate voting shares available for issuance, in the aggregate, under the Stock Option Plan and the LTIP will be automatically increased on January 1st of each year, beginning on January 1, 2016 and ending on January 1, 2026, in an amount equal to 5% of the aggregate number of outstanding Class A subordinate voting shares and Class B multiple voting shares on December 31st of the preceding calendar year. As at January 1, 2019 there were 15,047,030 shares available for issuance under the Company's Stock Option Plan and LTIP.

The following table summarizes the stock option and RSU award activities under the Company's share-based compensation plans for the years ended December 31, 2018 and 2017 :

	Shares Subject to Options Outstanding					Outstanding RSUs	
	Number of Options [(1)]	Weighted Average Exercise Price $	Remaining Contractual Term (in years)	Aggregate Intrinsic Value [(2)] $	Weighted Average Grant Date Fair Value $	Outstanding RSUs	Weighted Average Grant Date Fair Value $
December 31, 2016	**9,899,393**	**9.74**	**6.78**	**328,003**	**—**	**2,360,817**	**29.97**
Stock options granted	1,061,478	74.80	—	—	37.51	—	—
Stock options exercised	(3,322,993)	4.45	—	—	—	—	—
Stock options forfeited	(284,332)	31.65	—	—	—	—	—
RSUs granted	—	—	—	—	—	1,172,707	81.89
RSUs settled	—	—	—	—	—	(824,215)	28.85
RSUs forfeited	—	—	—	—	—	(210,631)	40.21
December 31, 2017	**7,353,546**	**20.67**	**6.81**	**590,700**	**—**	**2,498,678**	**53.84**
Stock options granted	486,434	138.12	—	—	69.81	—	
Stock options exercised	(2,179,999)	13.99	—	—	—	—	
Stock options forfeited	(183,191)	44.58	—	—	—	—	
RSUs granted	—	—	—	—	—	1,127,094	139.58
RSUs settled	—	—	—	—	—	(935,002)	51.72
RSUs forfeited	—	—	—	—	—	(217,105)	68.70
December 31, 2018	**5,476,790**	**32.96**	**6.23**	**577,731**	**—**	**2,473,665**	**92.40**
Stock options exercisable as of December 31, 2018	3,517,755	12.19	5.22	444,159			

(1) As at December 31, 2018 , 2,790,681 of the outstanding stock options were granted under the Company's Legacy Option Plan and are exercisable for Class B multiple voting shares, and 2,686,109 of the outstanding stock options were granted under the Company's Stock Option Plan and are exercisable for Class A subordinate voting shares.

(2) The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying stock option awards and the closing market price of the Company's Class A subordinate voting shares as of December 31, 2018 and December 31, 2017 .

As at December 31, 2018 the Company had issued 347 Deferred Share Units under its Long Term Incentive Plan.

The total intrinsic value of stock options exercised and RSUs settled during the years ended December 31, 2018 and 2017 was $409,029 and $311,354 respectively. The aggregate intrinsic value of options exercised is calculated as the difference between the exercise price of the underlying stock option awards and the market value on the date of exercise.

As of December 31, 2018 and 2017 , there was $227,523 and $157,175 , respectively, of remaining unamortized compensation cost related to unvested stock options and RSUs granted to the Company's employees. This cost will be recognized over an estimated weighted-average remaining period of 2.24 years. Total unamortized compensation cost will be adjusted for future changes in estimated forfeitures.

Share-Based Compensation Expense

All share-based awards are measured based on the grant date fair value of the awards and recognized in the Consolidated Statements of Operations and Comprehensive Loss over the period during which the employee is required to perform services in exchange for the award (generally the vesting period of the award).

The Company estimates the fair value of stock options granted using the Black-Scholes option valuation model, which requires assumptions, including the fair value of our underlying common stock, expected term, expected volatility, risk-free interest rate and dividend yield of the Company's common stock. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, share-based compensation expense could be materially different in the future.

These assumptions are estimated as follows:

- *Fair Value of Common Stock.* The Company uses the five-day volume weighted average price for its common stock as reported on the New York Stock Exchange.

- *Expected Term.* The Company determines the expected term based on the average period the stock options are expected to remain outstanding. The Company bases the expected term assumptions on its historical behavior combined with estimates of post-vesting holding period.

- *Expected Volatility.* The Company determines the price volatility factor based on a weighted combination of the Company's historical volatility and the historical volatility of publicly traded industry peers. To determine its peer group of companies, the Company considers public companies in the technology industry and selects those that are similar to us in size, stage of life cycle, and financial leverage. The Company intends to continue to consistently apply this methodology using the same or similar public companies until a sufficient amount of historical information regarding the volatility of its own common stock price becomes available, or unless circumstances change such that the identified companies are no longer similar, in which case, more suitable companies whose share prices are publicly available would be utilized in the calculation.

- *Risk-Free Interest Rate.* The Company bases the risk-free interest rate used in the Black-Scholes valuation model on the yield available on U.S. Treasury zero-coupon issues with an equivalent remaining term of the stock options for each stock option group.

- *Expected Dividend.* The Company has not paid and does not anticipate paying any cash dividends in the foreseeable future and, therefore, uses an expected dividend yield of zero in the option pricing model.

Expressed in US $000's except share and per share amounts

The assumptions used to estimate the fair value of stock options granted to employees are as follows:

	Years ended	
	December 31, 2018	**December 31, 2017**
Expected volatility	54.2%	56.0%
Risk-free interest rate	2.72%	1.85%
Dividend yield	Nil	Nil
Average expected life	5.31	5.15

In addition to the assumptions used in the Black-Scholes option valuation model, the Company must also estimate a forfeiture rate to calculate the share-based compensation expense for our awards. The Company's forfeiture rate is based on an analysis of its actual forfeitures. The Company will continue to evaluate the appropriateness of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover, and other factors. Changes in the estimated forfeiture rate can have a significant impact on share-based compensation expense as the cumulative effect of adjusting the rate is recognized in the period the forfeiture estimate is changed. If a revised forfeiture rate is higher/lower than the previously estimated forfeiture rate, an adjustment is made that will result in an increase/decrease to the share-based compensation expense recognized in the consolidated financial statements.

The following table illustrates the classification of stock-based compensation in the Consolidated Statements of Operations and Comprehensive Loss, which includes both stock-based compensation and restricted share-based compensation expense:

	Years ended	
	December 31, 2018	**December 31, 2017**
	$	**$**
Cost of revenues	2,232	1,102
Sales and marketing	21,928	8,986
Research and development	55,164	31,338
General and administrative	16,396	7,737
	95,720	49,163

Expressed in US $000's except share and per share amounts

18. Changes in Accumulated Other Comprehensive Income (Loss)

The following table summarizes the changes in accumulated other comprehensive income (loss), which is reported as a component of shareholders' equity, for the years ended December 31, 2018 and 2017 :

	Gains and Losses on Cash Flow Hedges (all amounts net of tax)	
	Years ended	
	December 31, 2018	December 31, 2017
	$	$
Balance, beginning of the year	3,435	(1,818)
Other comprehensive income (loss) before reclassifications	(19,821)	8,651
Amounts reclassified from accumulated other comprehensive income (loss) to earnings	4,170	(3,398)
Other comprehensive income (loss), net of tax	(15,651)	5,253
Balance, end of the year	(12,216)	3,435

19. Net Loss per Share

The Company applies the two-class method to calculate its basic and diluted net loss per share as both classes of its voting shares are participating securities with equal participation rights and are entitled to receive dividends on a share for share basis.

The following table summarizes the reconciliation of the basic weighted average number of shares outstanding and the diluted weighted average number of shares outstanding:

	December 31, 2018	December 31, 2017
Basic and diluted weighted average number of shares outstanding	105,671,839	95,774,897
The following items have been excluded from the diluted weighted average number of shares outstanding because they are anti-dilutive:		
Stock options	5,476,790	7,353,546
Restricted share units	2,473,665	2,498,678
	7,950,455	9,852,224

In the years ended December 31, 2018 and 2017 , the Company was in a loss position and therefore diluted loss per share is equal to basic loss per share.

Expressed in US $000's except share and per share amounts

20. Income Taxes

The domestic and foreign components of comprehensive loss before income taxes were as follows:

	Years ended	
	December 31, 2018	**December 31, 2017**
	$	**$**
Domestic	(71,188)	(31,056)
Foreign	(9,016)	(3,686)
	(80,204)	**(34,742)**

The reconciliation of the expected provision for income tax recovery/expense to the actual provision for income tax recovery/expense reported in the Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2018 and 2017 is as follows:

	Years ended	
	December 31, 2018	**December 31, 2017**
	$	**$**
Comprehensive loss	(80,204)	(34,742)
Expected income tax expense at Canadian statutory income tax rate of 26.51% (2017 - 26.51%)	(21,269)	(9,211)
Permanent differences	16,057	13,015
Share issuance costs	(6,599)	(4,502)
Stock-based compensation benefits	(3,132)	(4,722)
State tax losses	(659)	(4,875)
Other items	(88)	367
Foreign tax rate differential	1,726	711
Increase in valuation allowance	13,964	9,217
Provision for income tax (recovery) expense	—	—

During the years ended December 31, 2018 and 2017 , the comprehensive loss before income taxes includes foreign income loss of $9,016 and $3,686 , respectively.

Expressed in US $000's except share and per share amounts

The significant components of the Company’s deferred income tax assets and liabilities as of December 31, 2018 and 2017 are as follows:

	December 31, 2018 $	December 31, 2017 $
Deferred tax assets		
State tax loss carryforwards	7,493	6,839
Share issuance costs	8,011	6,662
Lease accruals and reserves	8,384	5,747
Tax loss carryforwards	12,047	4,283
Scientific Research & Experimental Development (SR&ED) expenditure carryforwards	2,539	3,486
Temporary differences on capital and intangible assets	2,366	3,236
Investment tax credits	3,294	3,046
Stock based compensation expense	6,427	237
Valuation allowance	(46,343)	(31,653)
Total deferred tax assets	**4,218**	**1,883**
Deferred tax liabilities		
Capitalized software development costs	5,350	3,271
Total deferred tax liabilities	**5,350**	**3,271**
Net deferred tax liability	**1,132**	**1,388**

Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing deferred tax assets. On the basis of this evaluation, as of December 31, 2018, a valuation allowance continues to be recorded against all of our deferred tax assets as we believe that it is not more likely than not that our deferred tax assets will be realized.

The Company does no t have any unrecognized tax benefits.

The Company's accounting policy is to recognize interest and penalties related to uncertain tax positions as a component of income tax expense. In the years ended December 31, 2018 and 2017 , there was no interest or penalties related to uncertain tax positions.

The Company and its Canadian subsidiaries file federal and provincial income tax returns in Canada. The Company and its U.S. subsidiaries file federal and state income tax returns in the U.S. and other foreign subsidiaries file income tax returns in their respective foreign jurisdictions. The Company remains subject to audit by the relevant tax authorities for the years ended 2011 through 2018 .

The Company was subject to a corporate income tax audit by the Canadian Revenue Agency (CRA) for tax years ending December 31, 2015. During the year ending December 31, 2018, the CRA concluded its audit with no reassessment and, thus, no interest or penalties. There is no impact to the consolidated financial statements for the year ending December 31, 2018.

The Company estimates SR&ED expenditures and claims investment tax credits for income tax purposes based on management’s interpretation of the applicable legislation in the Income Tax Act and related provincial legislation. These claims are subject to audit by the tax authorities. In the opinion of management, the treatment of research and development expenditures for income tax purposes is appropriate. Any difference between recorded investment tax credits and amounts ultimately received is recorded when the amount becomes known.

Expressed in US $000's except share and per share amounts

As at December 31, 2018 and 2017 , the Company had unused non-capital tax losses of approximately $169,967 and $96,495 respectively. $17,210 of the non-capital tax losses as at December 31, 2018 do not expire, while the $152,757 remaining non-capital tax losses are due to expire between 2032 and 2038. U.S. state losses of $116,026 are included in the balance at December 31, 2018 . In addition, at December 31, 2018 and 2017 , the Company has a SR&ED expenditure pool balance totaling $9,575 and $13,148 , respectively, which does not expire, and investment tax credits of $4,179 and $3,762 , respectively. The investment tax credits are due to expire between 2030 and 2038.

21. Segment and Geographical Information

The Company has determined that it operates in a single operating and reportable segment.

The following table presents total external revenues by geographic location, based on the location of the Company's merchants:

	Years ended			
	December 31, 2018		December 31, 2017	
	$	%	$	%
Canada	70,774	6.6%	48,107	7.2%
United States	755,454	70.4%	478,286	71.0%
United Kingdom	69,596	6.5%	44,590	6.6%
Australia	47,937	4.5%	31,625	4.7%
Rest of World	129,468	12.0%	70,696	10.5%
	1,073,229	100.0%	673,304	100.0%

The following table presents the total net book value of the Company's long-lived physical assets by geographic location:

	December 31, 2018		December 31, 2017	
	$	%	$	%
Canada	58,460	94.9%	40,309	80.0%
United States	1,593	2.6%	9,633	19.2%
Rest of World	1,559	2.5%	418	0.8%
	61,612	100.0%	50,360	100.0%

22. Business Acquisitions

Solutions Alveo Inc.

On June 22, 2018, the Company completed the acquisition of Solutions Alveo Inc., a company based in Montreal, Canada, which developed an app that helps automate the return process for Shopify merchants. The Company acquired 100 percent of the outstanding shares of Solutions Alveo Inc. The transaction was accounted for as a business combination. The operations of Solutions Alveo Inc. have been consolidated into the Company's results as of the acquisition date.

Expressed in US $000's except share and per share amounts

Tictail, Inc.

On November 19, 2018, the Company completed the acquisition of Tictail, Inc. and all of its subsidiaries (Tictail), a Delaware corporation based in Stockholm, Sweden, which operates an e-commerce platform. The Company acquired 100 percent of the outstanding shares of Tictail in exchange for cash consideration of $17,144 . The transaction was accounted for as a business combination. The operations of Tictail have been consolidated into the Company's results as of the acquisition date.

The following table summarizes the final purchase price allocation of the Tictail assets acquired and liabilities assumed at the acquisition date:

	Amount $
Net closing working capital:	
Cash	1,465
Trade and other receivables	156
Other current assets	1,054
Accounts payable and accrued liabilities	(207)
Other current liabilities	(1,640)
Estimated fair value of identifiable assets acquired:	
Acquired technology	1,400
Customer relationships	100
Goodwill	15,125
Deferred tax liability on acquired intangibles	(309)
Total purchase price	**17,144**

The acquired technology was valued at $1,400 and customer relationships were valued at $100 using a cost approach. The acquired intangibles are being amortized over periods ranging from 1 to 3 years. Goodwill from the Tictail acquisition is primarily attributable to the assembled workforce. None of the goodwill recognized is expected to be deductible for income tax purposes. The deferred tax liability relates to the taxable temporary difference on the acquired intangible assets.

Expressed in US $000's except share and per share amounts

Oberlo UAB

On April 28, 2017, the Company completed the acquisition of Oberlo UAB (Oberlo), a company located in Lithuania that facilitates product sourcing and dropshipping. The Company acquired 100 percent of the outstanding shares of Oberlo in exchange for cash consideration of $17,239 . The transaction was accounted for as a business combination. The operations of Oberlo have been consolidated into the Company's results as of the acquisition date.

The following table summarizes the final purchase price allocation of the Oberlo assets acquired and liabilities assumed at the acquisition date:

	Amount $
Net closing working capital:	
Cash	1,521
Trade and other receivables	1,603
Accounts payable and accrued liabilities	(885)
Estimated fair value of identifiable assets acquired:	
Acquired technology	11,590
Customer relationships	395
Goodwill	4,813
Deferred tax liability on acquired intangibles	(1,798)
Total purchase price	**17,239**

The acquired technology, the Oberlo app, was valued at $11,590 and customer relationships were valued at $395 using a discounted cash flow methodology, and are being amortized over 3 and 2 years, respectively. Goodwill from the Oberlo acquisition is primarily attributable to the expected synergies that will result from integrating the Oberlo solution with the Company's platform, and the acquisition of an assembled workforce. None of the goodwill recognized is expected to be deductible for income tax purposes. The deferred tax liability relates to the taxable temporary difference on the acquired intangible assets.

23. Comparative Figures

Certain comparative figures have been reclassified in order to conform to the current period presentation.

EXHIBIT 1.3

MANAGEMENT'S DISCUSSION AND ANALYSIS

February 12, 2019

In this Management's Discussion and Analysis ("MD&A"), "we", "us", "our", "Shopify" and "the Company" refer to Shopify Inc. and its consolidated subsidiaries, unless the context requires otherwise. In this MD&A, we explain Shopify's results of operations and cash flows for the fourth quarter and the fiscal years ended December 31, 2018 , 2017 , and 2016 , and our financial position as of December 31, 2018 . You should read this MD&A together with our audited consolidated financial statements and the accompanying notes for the fiscal years ended December 31, 2018 , 2017 , and 2016 . Additional information regarding Shopify, including our 2018 annual information form and our annual report on Form 40-F for the year ended December 31, 2018 , is available on our website at www.shopify.com, or at www.sedar.com and www.sec.gov.

Our audited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). All amounts are in U.S. dollars ("USD") except where otherwise indicated.

Our MD&A is intended to enable readers to gain an understanding of Shopify's results of operations, cash flows and financial position. To do so, we provide information and analysis comparing our results of operations, cash flows and financial position for the most recently completed fiscal year with the preceding fiscal year. We also provide analysis and commentary that we believe will help investors assess our future prospects. In addition, we provide "forward-looking statements" that are not historical facts, but that are based on our current estimates, beliefs and assumptions and which are subject to known and unknown important risks, uncertainties, assumptions and other factors that could cause actual results to differ materially from current expectations. Forward-looking statements are intended to assist readers in understanding management's expectations as of the date of this MD&A and may not be suitable for other purposes. See "Forward-looking statements" below.

In this MD&A, references to our "solutions" means the combination of products and services that we offer to merchants, and references to "our merchants" as of a particular date means the total number of unique shops that are paying for a subscription to our platform.

Forward-looking statements

This MD&A contains forward-looking statements under the provisions of the United States Private Securities Litigation Reform Act of 1995, Section 27A of the U.S. Securities Act of 1933, as amended, and Section 21E of the U.S. Securities Exchange Act of 1934, and forward-looking information within the meaning of applicable Canadian securities legislation.

In some cases, you can identify forward-looking statements by words such as "may", "might", "will", "should", "could", "expects", "intends", "plans", "anticipates", "believes", "estimates", "predicts", "projects", "potential", "continue", or the negative of these terms or other similar words. In addition, any statements or information that refer to expectations, beliefs, plans, projections, objectives, performance or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking. In particular, forward-looking statements in this MD&A include, but are not limited to, statements about:

- the continued expansion of the number of channels for merchants to transact through;
- the achievement of innovations and enhancements to, and expansion of, our platform and our solutions;
- our exploration of new ways to accelerate checkout;
- our ability to make it easier for merchants to manage their storefronts via their mobile devices;
- whether a merchant using Shopify will ever need to re-platform;
- the continued growth of our app developer, theme designer and partner ecosystem;

- our revenue growth objectives and expectations about future profitability;
- plans to continue making investments to drive future growth;
- our expectation that the continued growth of merchant solutions may cause a decline in our overall gross margin percentage;
- our expectation that as a result of the continued growth of our merchant solutions offerings, our seasonality will continue to affect our quarterly results and our business may become more seasonal in the future, and that historical patterns may not be a reliable indicator of our future performance;
- our expectation that our subscription solutions gross margin percentage will fluctuate modestly based on the mix of subscription plans that our merchants select;
- our expectation that the cost of merchant solutions will increase in absolute dollars in the future as the number of merchants utilizing these solutions increases and the volume processed also grows;
- our expectation that there may be increases in our gross margin percentage of merchant solutions as additional higher-margin merchant solutions offerings, such as Shopify Capital and Shopify Shipping, become a larger component of our merchant solutions revenue;
- our plan to continue to expand sales and marketing efforts to attract new merchants, retain revenue from existing merchants and increase revenues from both new and existing merchants, including adding sales personnel and expanding our marketing activities to continue to generate additional leads and build brand awareness;
- our expectation that sales and marketing expenses will decline as a percentage of total revenues over time;
- our expectation that research and development expenses will increase in absolute dollars as we continue to increase the functionality of our platform, but will decline as a percentage of total revenues over the long term;
- our expectation that general and administrative expenses will increase on an absolute dollar basis but may decrease as a percentage of total revenues as we focus on processes, systems and controls to enable our internal support functions to scale with the growth of our business;
- our expectation that the overall trend of merchant solutions revenue making up an increasing component of total revenues over time, most notably in the fourth quarter due to higher holiday volume, will continue over time;
- our expectation that our results of operations will be adversely impacted by an increase in the value of the Canadian dollar ("CAD") relative to the USD;
- our belief that we have sufficient liquidity to meet our current and planned financial obligations over the next 12 months;
- our expectations regarding contractual and contingent obligations;
- our accounting estimates and assumptions made in the preparation of our financial statements; and
- our expectations regarding the impact of accounting standards not yet adopted.

The forward-looking statements contained in this MD&A are based on our management's perception of historic trends, current conditions and expected future developments, as well as other assumptions that management believes are appropriate in the circumstances, which include, but are not limited to:

- our ability to increase the functionality of our platform;
- our ability to offer more sales channels that can connect to the platform;
- our belief in the increasing importance of a multi-channel platform that is both fully integrated and easy to use ;
- our belief that commerce transacted over mobile will continue to grow more rapidly than desktop transactions;
- our ability to expand our merchant base, retain revenue from existing merchants as they grow their businesses, and increase sales to both new and existing merchants;
- our ability to manage our growth effectively;
- our ability to protect our intellectual property rights;
- our belief that our merchant solutions make it easier for merchants to start a business and grow on our platform;

- our ability to develop new solutions to extend the functionality of our platform, provide a high level of merchant service and support;
- our ability to hire, retain and motivate qualified personnel;
- our ability to enhance our ecosystem and partner programs, and the assumption that this will drive growth in our merchant base, further accelerating growth of the ecosystem;
- our belief that our investments and acquisitions will increase our revenue base, improve the retention of this base and strengthen our ability to increase sales to our merchants and help drive our growth;
- our ability to achieve our revenue growth objectives while controlling costs and expenses, and our ability to achieve or maintain profitability;
- our belief that monthly recurring revenue ("MRR") is most closely correlated with the long-term value of our merchant relationships;
- our assumptions regarding the principal competitive factors in our markets;
- our ability to predict future commerce trends and technology;
- our assumptions that higher-margin solutions such as Shopify Capital and Shopify Shipping will continue to contribute to revenues and to grow through increased adoption and international expansion;
- our expectation that Shopify Payments will continue to expand internationally;
- our belief that our investments in sales and marketing initiatives will continue to be effective in growing the number of merchants using our platform, in retaining revenue from existing merchants and increasing revenues from both;
- our ability to develop processes, systems and controls to enable our internal support functions to scale with the growth of our business;
- our ability to obtain sufficient space for our growing employee base;
- our ability to retain key personnel;
- our ability to protect against currency, interest rate, concentration of credit and inflation risks;
- our assumptions as to our future expenses and financing requirements;
- our assumptions as to our critical accounting policies and estimates; and
- our assumptions as to the effects of accounting pronouncements to be adopted.

Factors that may cause actual results to differ materially from current expectations may include, but are not limited to, risks and uncertainties that are discussed in greater detail in the "Risk Factors" section of our Annual Information Form for the year ended December 31, 2018 and elsewhere in this MD&A, including but not limited to risks relating to:

- sustaining our rapid growth;
- managing our growth;
- our history of losses and our potential inability to achieve profitability;
- our limited operating history in new and developing markets and new geographic regions;
- our ability to innovate;
- a denial of service attack or security breach;
- payments processed through Shopify Payments;
- our reliance on a single supplier to provide the technology we offer through Shopify Payments;
- the security of personal information we store relating to merchants and their buyers, as well as buyers with whom we have a direct relationship;
- evolving privacy laws and regulations, cross-border data transfer restrictions, data localization requirements and other domestic or foreign regulations may limit the use and adoption of our services;
- our potential inability to hire, retain and motivate qualified personnel;
- international sales and the use of our platform in various countries;
- our potential inability to compete successfully against current and future competitors;
- serious software errors or defects;
- exchange rate fluctuations that may negatively affect our results of operations;
- our potential inability to achieve or maintain data transmission capacity;
- the reliance of our growth in part on the success of our strategic relationships with third parties;
- our potential failure to maintain a consistently high level of customer service;
- our use of a limited number of data centers and a cloud-based platform to deliver our services;

- ineffective operations of our solutions when accessed through mobile devices;
- changes to technologies used in our platform or new versions or upgrades of operating systems and internet browsers;
- the impact of worldwide economic conditions, including the resulting effect on spending by small and medium-sized businesses ("SMBs") or their buyers;
- potential claims by third parties of intellectual property infringement;
- our potential inability to obtain, maintain and protect our intellectual property rights and proprietary information or prevent third parties from making unauthorized use of our technology;
- our use of open source software;
- our potential inability to generate traffic to our website through search engines and social networking sites;
- our potential failure to effectively maintain, promote and enhance our brand;
- our dependence on the continued services and performance of our senior management and other key employees;
- activities of merchants or partners or the content of merchants' shops;
- acquisitions and investments;
- seasonal fluctuations;
- our reliance on computer hardware, purchased or leased, software licensed from and services rendered by third parties, in order to provide our solutions and run our business, sometimes by a single-source supplier;
- Shopify Capital and offering financing;
- our pricing decisions for our solutions;
- provisions of our financial instruments;
- our potential inability to raise additional funds as may be needed to pursue our growth strategy or continue our operations, on favorable terms or at all;
- unanticipated changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns;
- new tax laws could be enacted or existing laws could be applied to us or our merchants;
- our tax loss carryforwards;
- our dependence upon buyers' and merchants' access to, and willingness to use, the internet for commerce;
- ownership of our shares;
- our sensitivity to interest rate fluctuations;
- our concentration of credit risk, and the ability to mitigate that risk using third parties; and
- the risk of inflation.

Although we believe that the plans, intentions, expectations, assumptions and strategies reflected in our forward-looking statements are reasonable, these statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors which are, in some cases, beyond our control. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future results. You should read this MD&A and the documents that we reference in this MD&A completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

The forward-looking statements in this MD&A represent our views as of the date of this MD&A. We anticipate that subsequent events and developments may cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. Therefore, these forward-looking statements do not represent our views as of any date other than the date of this MD&A.

Overview

Shopify is the leading cloud-based, multi-channel commerce platform. Shopify builds web- and mobile-based software and lets merchants easily set up beautiful online storefronts that are rich with retail functionality. Merchants use our software to run their business across all of their sales channels, including web and mobile storefronts, physical retail locations, social media storefronts, and marketplaces. The Shopify platform provides merchants with a single view of their business and customers across all of their sales channels and enables them to manage products and inventory, process orders and payments, ship orders, build customer relationships, source products, leverage analytics and reporting, and access financing, all from one integrated back office.

In an era where social media, cloud computing, mobile devices, and data analytics are creating new possibilities for commerce, Shopify provides differentiated value by offering merchants:

A multi-channel front end . Our software enables merchants to easily display, manage, and sell their products across over a dozen different sales channels, including web and mobile storefronts, physical retail locations, pop-up shops, social media storefronts, native mobile apps, buy buttons, and marketplaces. The Shopify API has been developed to support custom storefronts that let merchants sell anywhere, in any language.

A single integrated back end . Our software provides one single integrated, easy-to-use back end that merchants use to manage their business and buyers across these multiple sales channels. Merchants use their Shopify dashboard to manage products and inventory, process orders and payments, ship orders, build customer relationships, source products, leverage analytics and reporting, and access financing.

A data advantage . Our software is delivered to merchants as a service, and operates on a shared infrastructure. With each new transaction processed, we grow our data proficiency. This cloud-based infrastructure not only relieves merchants from running and securing their own hardware, it also consolidates data generated by the interactions between buyers and merchants' shops, as well as those of our merchants on the Shopify platform, providing rich data to inform both our own decisions as well as those of our merchants.

Shopify also enables merchants to build their own brand, leverage mobile technology, and handle massive traffic spikes with flexible infrastructure.

Brand ownership . Shopify is designed to help our merchants own their brand, develop a direct relationship with their buyers, and make their buyer experience memorable and distinctive. We recognize that in a world where buyers have more choices than ever before, a merchant's brand is increasingly important. The Shopify platform is designed to allow a merchant to keep their brand present in every interaction to help build buyer loyalty and competitive advantage against traditional retailers. While our platform is designed to empower merchants first, merchants benefit when buyers are confident that their payments are secure. We believe that an increasing awareness among buyers that Shopify provides a superior and secure checkout experience is an additional advantage for our merchants in an increasingly competitive market. For merchants using Shopify Payments, buyers are already getting a superior experience, and with our investments in additional customer touchpoints such as retail and shipping, brands that sell on Shopify can offer buyers an end-to-end, managed shopping experience that previously was only available to much larger businesses.

Mobile . As ecommerce expands as a percentage of overall retail transactions, today's buyers expect to be able to transact anywhere, anytime, on any device through an experience that is simple, seamless, and secure. As transactions over mobile devices represent the majority of transactions across online stores powered by Shopify, the mobile experience is a merchant's primary and most important interaction with online buyers. For several years Shopify has focused on enabling mobile commerce, and the Shopify platform now includes a mobile-optimized checkout system, designed to enable merchants' buyers to more easily buy products over mobile websites. Our merchants are able to offer their buyers the ability to quickly and securely check out by using Shopify Pay, Apple Pay, and Google Pay on the web, and we continue to explore other new ways to accelerate checkout. Shopify's mobile capabilities are not limited to the front end: merchants who are often on-the-go find themselves managing their storefronts via their mobile devices, as Shopify continues to strive to make it ever easier to do so.

Infrastructure . We build our platform to address the growing challenges facing merchants with the aim of making complex tasks simple. The Shopify platform is engineered to enterprise-level standards and functionality while being designed for simplicity and ease of use. We also design our platform with a robust technical infrastructure able to manage large spikes in traffic that accompany events such as new product releases, holiday shopping seasons, and flash sales. We are constantly innovating and enhancing our platform, with our continuously deployed, multi-tenant architecture ensuring all of our merchants are always using the latest technology.

This combination of ease of use with enterprise-level functionality allows merchants to start with a Shopify store and grow with our platform to almost any size. Using Shopify, merchants may never need to re-platform. Our Shopify Plus subscription plan was created to accommodate larger merchants, with additional functionality, scalability and support requirements. Shopify Plus is also designed for larger merchants not already on Shopify who want to migrate from their expensive and complex legacy solutions and get more functionality.

A rich ecosystem of app developers, theme designers and other partners, such as digital and service professionals, marketers, photographers, and affiliates has evolved around the Shopify platform. Approximately 18,000 of these partners have referred merchants to Shopify over the last year, and this strong, symbiotic relationship continues to grow. We believe this ecosystem has grown in part due to the platform’s functionality, which is highly extensible and can be expanded through our application program interface ("API") and the approximately 2,500 apps available in the Shopify App Store. The partner ecosystem helps drive the growth of our merchant base, which in turn further accelerates growth of the ecosystem.

Our mission is to make commerce better for everyone, and we believe we can help merchants of nearly all sizes, from aspirational entrepreneurs to large enterprises, and all retail verticals realize their potential at all stages of their business life cycle. While our platform can scale to meet the needs of large merchants, we focus on selling to small and medium-sized businesses and entrepreneurs. Most of our merchants are on subscription plans that cost less than $50 per month, which is in line with our focus of providing cost effective solutions for early stage businesses. In the year ended December 31, 2018 , our platform facilitated Gross Merchandise Volume ("GMV") of $41.1 billion , representing an increase of 56.2% from the year ended December 31, 2017 . A detailed description of this metric is presented below in the section entitled, “Key Performance Indicators.”

Our business has experienced rapid growth. During the year ended December 31, 2018 our total revenue was $1,073.2 million , an increase of 59.4% versus the year ended December 31, 2017 . Our business model has two revenue streams: a recurring subscription component we call subscription solutions and a merchant success-based component we call merchant solutions.

In the year ended December 31, 2018 , subscription solutions revenues accounted for 43.3% of our total revenues (46.0% in the year ended December 31, 2017). We offer a range of plans that increase in price depending on additional features and economic considerations. Our highest-end plan, Shopify Plus, is offered at a starting rate that is several times that of our standard Shopify plans. Shopify Plus caters to merchants with higher-volume sales and offers additional functionality, scalability and support requirements, including a dedicated Merchant Success Manager. Unilever, Kylie Cosmetics, Allbirds, and MVMT are a few of the Shopify Plus merchants seeking a reliable, cost-effective and scalable commerce solution. The flexibility of our pricing plans is designed to help our merchants grow in a cost-effective manner and to provide more advanced features and support as their business needs evolve.

Revenue from subscription solutions is generated through the sale of subscriptions to our platform, including variable platform fees, and from the sale of themes, apps, and the registration of domain names. Our merchants typically enter into monthly subscription agreements. The revenue from these agreements is recognized over time on a ratable basis over the contractual term and therefore we have deferred revenue on our balance sheet. We do not consider this deferred revenue balance to be a good indicator of future revenue. Instead, we believe Monthly Recurring Revenue ("MRR") is most closely correlated with the long-term value of our merchant relationships. Subscription solutions revenues increased from $310.0 million in the year ended December 31, 2017 to $465.0 million in the year ended December 31, 2018 , representing an increase of 50.0% . As of December 31, 2018 , MRR totaled $40.9 million , representing an increase of 37.0% relative to MRR at December 31, 2017 . Subscription solutions revenue has been growing at a faster rate than

MRR due to apps and platform fees increasing as a percentage of total subscription solutions. A detailed description of this metric is presented below in the section entitled, "Key Performance Indicators". The number of merchants on our platform has grown from approximately 609,000 as at December 31, 2017 to approximately 820,000 as at December 31, 2018.

We offer a variety of merchant solutions that are designed to add value to our merchants and augment our subscription solutions. During the year ended December 31, 2018 , merchant solutions revenues accounted for 56.7% of total revenues (54.0% in the year ended December 31, 2017). We principally generate merchant solutions revenues from payment processing fees from Shopify Payments. Shopify Payments is a fully integrated payment processing service that allows our merchants to accept and process payment cards online and offline. In addition to payment processing fees from Shopify Payments, we also generate merchant solutions revenue from transaction fees, referral fees from partners, Shopify Capital, Shopify Shipping, and sales of point-of-sale ("POS") hardware. Our merchant solutions revenues are directionally correlated with the level of GMV that our merchants process through our platform. Merchant solutions revenues increased from $363.3 million in the year ended December 31, 2017 to $608.2 million in the year ended December 31, 2018 , representing an increase of 67.4% .

Our business model is driven by our ability to attract new merchants, retain revenue from existing merchants, and increase sales to both new and existing merchants. Our merchants represent a wide array of retail verticals and business sizes and no single merchant has ever represented more than five percent of our total revenues in a single reporting period. We believe that our future success is dependent on many factors, including our ability to expand our merchant base, retain merchants as they grow their businesses on our platform, offer more sales channels that connect merchants with their specific target audience, develop new solutions to extend our platform’s functionality and catalyze merchants’ sales growth, enhance our ecosystem and partner programs, provide a high level of merchant support, hire, retain and motivate qualified personnel, and build with a focus on maximizing long-term value.

We have focused on rapidly growing our business and plan to continue making investments to drive future growth. We believe that our investments will increase our revenue base, improve the retention of this base and strengthen our ability to increase sales to our merchants.

Key Performance Indicators

Key performance indicators, which we do not consider to be non-GAAP measures, that we use to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions include Monthly Recurring Revenue ("MRR") and Gross Merchandise Volume ("GMV"). Our key performance indicators may be calculated in a manner different than similar key performance indicators used by other companies.

The following table shows MRR and GMV for the years ended December 31, 2018 and 2017 .

	Years ended December 31,	
	2018	**2017**
	(in thousands)	
Monthly Recurring Revenue	$ 40,932	$ 29,877
Gross Merchandise Volume	$ 41,103,238	$ 26,320,150

Monthly Recurring Revenue

We calculate MRR at the end of each period by multiplying the number of merchants who have subscription plans with us at the period end date by the average monthly subscription plan fee, which excludes variable platform fees, in effect on the last day of that period, assuming they maintain their subscription plans the following month. MRR allows us to average our various pricing plans and billing periods into a single, consistent number that we can track over time. We also analyze the factors that make up MRR, specifically the number of paying merchants using our platform and changes in our average revenue earned from subscription plan fees per paying merchant. In addition, we use MRR to forecast monthly, quarterly and annual subscription plan revenue, which makes up the majority of our subscriptions solutions revenue. We had $40.9 million of MRR as at December 31, 2018 compared to $29.9 million as at December 31, 2017 .

Gross Merchandise Volume

GMV is the total dollar value of orders facilitated through our platform in the period, net of refunds, and inclusive of shipping and handling, duty and value-added taxes. GMV does not represent revenue earned by us. However, the volume of GMV facilitated through our platform is an indicator of the success of our merchants and the strength of our platform. Our merchant solutions revenues are also directionally correlated with the level of GMV facilitated through our platform. For the years ended December 31, 2018 and 2017 , we facilitated GMV of $41.1 billion and $26.3 billion , respectively. For merchants on the platform for 12 months or more, the average monthly year-over-year GMV growth was 24% (2017 - 29%).

Factors Affecting the Comparability of Our Results

Change in Revenue Mix

As a result of the continued growth of Shopify Payments, transaction fees, revenue sharing agreements, Shopify Capital, and Shopify Shipping, our revenues from merchant solutions have generally increased significantly. Merchant solutions are intended to complement subscription solutions by providing additional value to our merchants and increasing their use of our platform. Gross profit margins on Shopify Payments, the biggest driver of merchant solutions revenue, are typically lower than on subscription solutions due to the associated third-party costs of providing this solution. We view this revenue stream as beneficial to our operating margins, as Shopify Payments requires significantly less sales and marketing and research and development expense than Shopify's core subscription business. The lower margins on merchant solutions compared to subscription solutions means that the continued growth of merchant solutions may cause a decline in our overall gross margin percentage.

Seasonality

Our merchant solutions revenues are directionally correlated with the level of GMV that our merchants facilitated through our platform. Our merchants typically process additional GMV during the fourth quarter holiday season. As a result, we have historically generated higher merchant solutions revenues in our fourth quarter than in other quarters. While we believe that this seasonality has affected and will continue to affect our quarterly results, our rapid growth has largely masked seasonal trends to date. As a result of the continued growth of our merchant solutions offerings, we believe that our business may become more seasonal in the future and that historical patterns in our business may not be a reliable indicator of our future performance.

Foreign Currency Fluctuations

While most of our revenues are denominated in USD, a significant portion of our operating expenses are incurred in CAD. As a result, our results of operations will be adversely impacted by an increase in the value of the CAD relative to the USD. In addition, a portion of Shopify Payments revenue is based on the local currency of the country in which the applicable merchant is located and these transactions expose us to currency fluctuations to the extent non-USD based payment processing and other merchant solutions revenues increase. Refer to the "Quantitative and Qualitative Disclosures about Market Risk— Foreign Currency Exchange Risk" section below for additional information on the effect on reported results of changes in foreign exchange rates.

Key Components of Results of Operations

Revenues

We derive revenues from subscription solutions and merchant solutions.

Subscription Solutions

We principally generate subscription solutions revenues through the sale of subscriptions to our platform, including variable platform fees. We also generate associated subscription solutions revenues from the sale of themes, apps, and the registration of domain names.

We offer subscription plans with various price points, from entry level plans to Shopify Plus, a plan for merchants with higher-volume sales that offers additional functionality, scalability and support. Our subscription plans typically have a one-month term, although a small number of our merchants have annual or multi-year subscription terms. Subscription terms automatically renew unless notice of cancellation is provided in advance. Merchants purchase subscription plans directly from us. Subscription fees for all plans, except Shopify Plus, are paid to us at the start of the applicable subscription period, regardless of the length of the subscription period. Shopify Plus plans are billed in arrears. For subscription fees that are received in advance of providing the related services, we record deferred revenue on our consolidated balance sheet for the unearned revenue and recognize revenue over time on a ratable basis over the contractual term. These subscription fees are non-refundable.

We also generate additional subscription solutions revenues from merchants that have subscription plans with us through the sale of themes, apps, and the registration of domain names. Revenues from the sale of themes and apps are recognized at the time of the transaction. The right to use domain names is sold separately and is recognized on a ratable basis over the contractual term, which is typically an annual term. Revenues from the sale of apps are recognized net of amounts attributable to the third-party app developers, while revenues from the sale of themes and domains are recognized on a gross basis. Revenues from the sale of themes, apps, and the registration of domain names have been classified within subscription solutions on the basis that they are typically sold at the time the merchant enters into the subscription arrangement or because they are charged on a recurring basis. Revenues from variable platform fees are based on the merchants' volume of sales and recognized as revenue when we have a right to invoice. They are classified within subscription solutions because they represent a variable component of the merchants' subscription fee.

Merchant Solutions

We generate merchant solutions revenues from payment processing fees from Shopify Payments, transaction fees, referral fees from partners, Shopify Capital, Shopify Shipping, and sales of POS hardware.

The significant majority of merchant solutions revenues are generated from Shopify Payments. Revenue from processing payments is recognized at the time of the transaction. For Shopify Payments transactions, fees are determined based in part on a percentage of the dollar amount processed plus a per transaction fee, where applicable.

For subscription plans where the merchant does not sign up for Shopify Payments, we typically charge a transaction fee based on a percentage of GMV sold through the platform. We bill our merchants for transaction fees at the end of a 30-day billing cycle or when predetermined billing thresholds are surpassed. Any fees that have not been billed are accrued as an unbilled receivable at the end of the reporting period.

We also generate merchant solutions revenues in the form of referral fees from partners to which we direct business and with which we have an arrangement in place. Pursuant to terms of the agreements with our partners, these revenues can be recurring or non-recurring. Where the agreement provides for recurring payments to us, we typically earn revenues so long as the merchant that we have referred to the partner continues to use the services of the partner. Non-recurring revenues generally take the form of one-time payments that we receive when we initially refer the merchant to the partner. In either case, we recognize referral revenues when we are entitled to receive payment from the partner pursuant to the terms of the underlying agreement.

Shopify Capital, a merchant cash advance ("MCA") and loan program for eligible merchants, is offered in the United States to help eligible merchants secure financing and accelerate the growth of their business by providing access to simple, fast, and convenient working capital. We apply underwriting criteria prior to purchasing the eligible merchant's future receivables or making a loan to help ensure collectibility. Under Shopify Capital, we purchase a designated amount of future receivables at a discount or make a loan. The advance, or the loan, is forwarded to the merchant at the time the related agreement is entered into, and the merchant remits a fixed percentage of their daily sales until the outstanding balance has been remitted. For Shopify Capital MCA's, we apply a percentage of the remittances collected against the merchant's receivable balance, and a percentage, which is related to the discount, as merchant solutions revenue. For Shopify Capital loans, because there is a fixed maximum repayment term, we calculate an effective interest rate based on the merchant's expected future payment volume to determine how much of a merchant's repayment to recognize as revenue and how much to apply against the merchant's receivable balance. We have mitigated some of the risks associated with Shopify Capital by entering into an agreement with a third party to insure MCA's offered by Shopify Capital.

Shopify Shipping allows merchants to buy and print outbound and return shipping labels and track orders directly within the Shopify platform. We bill our merchants when they have purchased shipping labels in excess of predetermined billing thresholds, and any charges that have not been billed are accrued as unbilled receivables at the end of the reporting period. For Shopify Shipping, fees are determined based on the type of labels purchased or the arrangement negotiated with third parties. In the case of the former, we recognize revenue from Shopify Shipping net of shipping costs, as we are the agent in the arrangement with merchants.

In connection with Shopify POS, a sales channel that lets merchants sell their products and accept payments in-person from a mobile device, we sell compatible hardware products which are sourced from third-party vendors. We recognize revenues from the sale of POS hardware when title passes to the merchant in accordance with the shipping terms of the sale.

For a discussion of how we expect seasonal factors to affect our merchant solutions revenue, see “Factors Affecting the Comparability of our Results—Seasonality.”

Cost of Revenues

Cost of Subscription Solutions

Cost of subscription solutions consists primarily of costs associated with billing processing fees and operations and merchant support expenses. Operations and merchant support expenses include third-party infrastructure and hosting costs, personnel-related costs directly associated with operations and merchant support, including salaries, benefits and stock-based compensation, as well as allocated overhead. Overhead associated with facilities, information technology and depreciation is allocated to our cost of revenues and operating expenses based on headcount.

Additionally, cost of subscription solutions includes costs we are required to pay to third-party developers in connection with sales of themes. Our paid themes are primarily designed by third-party developers who earn fees for each theme sold by us.

Also included as cost of subscription solutions are domain registration fees and amortization of internal use software relating to the capitalized costs associated with the development of the platform and data infrastructure.

We expect that cost of subscription solutions will increase in absolute dollars as we continue to invest in growing our business, and as the number of merchants utilizing the platform increases along with the costs of supporting those merchants. Over time, we expect that our subscription solutions gross margin percentage will fluctuate modestly based on the mix of subscription plans that our merchants select and the timing of expenditures related to infrastructure expansion projects.

Cost of Merchant Solutions

Cost of merchant solutions primarily consists of costs that we incur when transactions are processed using Shopify Payments, such as credit card interchange and network fees (charged by credit card providers such as Visa, MasterCard and American Express) as well as third-party processing fees. Cost of merchant solutions also consists of third-party infrastructure and hosting costs and operations and merchant support expenses, including personnel-related costs directly associated with merchant solutions such as salaries, benefits and stock-based compensation, as well as allocated overhead. Overhead associated with facilities, information technology and depreciation is allocated to our cost of revenues and operating expenses based on headcount.

Cost of merchant solutions also includes costs associated with POS hardware, such as the cost of acquiring the hardware inventory, including hardware purchase price, expenses associated with our use of a third-party fulfillment company, shipping and handling and inventory adjustments. Also included within cost of merchant solutions is amortization of internal use software relating to capitalized costs associated with the development of merchant solutions.

We expect that the cost of merchant solutions will increase in absolute dollars in future periods as the number of merchants utilizing these solutions increases, the volume processed also grows, and we continue to expand Shopify Payments internationally. We believe that we may see increases in our gross margin percentage of merchant solutions as additional higher-margin merchant solutions offerings, such as Shopify Capital and Shopify Shipping, become a larger component of our merchant solutions revenue.

Operating Expenses

Sales and Marketing

Sales and marketing expenses consist primarily of marketing programs, partner referral payments related to merchant acquisitions, costs associated with partner and developer conferences, employee-related expenses for marketing, business development and sales, as well as the portion of merchant support required for the onboarding of prospective new merchants. Other costs within sales and marketing include travel-related expenses and corporate overhead allocations. Costs to acquire merchants are expensed as incurred, however, contract costs associated with Plus merchants are amortized over the expected life of their relative contract. We plan to continue to expand sales and marketing efforts to attract new merchants, retain revenue from existing merchants and increase revenues from both new and existing merchants. This growth will include adding sales personnel and expanding our marketing activities to continue to generate additional leads and build brand awareness. Sales and marketing expenses are expected to increase in absolute dollars but over time, we expect sales and marketing expenses will eventually decline as a percentage of total revenues.

Research and Development

Research and development expenses consist primarily of employee-related expenses for product management, product development, product design, data analytics, contractor and consultant fees and corporate overhead allocations. We continue to focus our research and development efforts on adding new features and solutions, and increasing the functionality and enhancing the ease of use of our platform. While we expect research and development expenses to increase in absolute dollars as we continue to increase the functionality of our platform, over the long term we expect our research and development expenses will eventually decline as a percentage of total revenues.

General and Administrative

General and administrative expenses consist of employee-related expenses for finance and accounting, legal, administrative, human relations and IT personnel, professional services fees, sales and use and other value added taxes, insurance, expected and actual losses related to Shopify Payments and Shopify Capital, other corporate expenses and corporate overhead allocations. We expect that general and administrative expenses will increase on an absolute dollar basis but may decrease as a percentage of total revenues as we focus on processes, systems and controls to enable our internal support functions to scale with the growth of our business.

Other Income (Expenses)

Other income (expenses) consists primarily of transaction gains or losses on foreign currency and interest income net of interest expense.

Results of Operations

The following table sets forth our consolidated statement of operations for the years ended December 31, 2018 , 2017 , and 2016 .

	Years ended December 31,		
	2018	2017	2016
	(in thousands, except share and per share data)		
Revenues:			
Subscription solutions	$ 464,996	$ 310,031	$ 188,606
Merchant solutions	608,233	363,273	200,724
	1,073,229	673,304	389,330
Cost of revenues [(1)] :			
Subscription solutions	100,990	61,267	39,478
Merchant solutions	375,972	231,784	140,357
	476,962	293,051	179,835
Gross profit	596,267	380,253	209,495
Operating expenses:			
Sales and marketing [(1)]	350,069	225,694	129,214
Research and development [(1)]	230,674	135,997	74,336
General and administrative [(1)]	107,444	67,719	43,110
Total operating expenses	688,187	429,410	246,660
Loss from operations	(91,920)	(49,157)	(37,165)
Other income	27,367	9,162	1,810
Net loss	$ (64,553)	$ (39,995)	$ (35,355)
Basic and diluted net loss per share attributable to shareholders	$ (0.61)	$ (0.42)	$ (0.42)
Weighted average shares used to compute net loss per share attributable to shareholders	105,671,839	95,774,897	83,988,597

(1) Includes stock-based compensation expense and related payroll taxes as follows:

	Years ended December 31,		
	2018	2017	2016
	(in thousands)		
Cost of revenues	$ 2,441	$ 1,281	$ 718
Sales and marketing	24,056	9,876	4,444
Research and development	59,575	34,560	15,364
General and administrative	17,690	9,485	4,495
	$ 103,762	$ 55,202	$ 25,021

The following table sets forth our consolidated statement of operations as a percentage of total revenues for the years ended December 31, 2018 , 2017 , and 2016 .

	Years ended December 31,		
	2018	2017	2016
Revenues			
Subscription solutions	43.3 %	46.0 %	48.4 %
Merchant solutions	56.7 %	54.0 %	51.6 %
	100.0 %	100.0 %	100.0 %
Cost of revenues			
Subscription solutions	9.4 %	9.1 %	10.1 %
Merchant solutions	35.0 %	34.4 %	36.1 %
	44.4 %	43.5 %	46.2 %
Gross profit	55.6 %	56.5 %	53.8 %
Operating expenses			
Sales and marketing	32.6 %	33.5 %	33.2 %
Research and development	21.5 %	20.2 %	19.1 %
General and administrative	10.0 %	10.1 %	11.1 %
Total operating expenses	64.1 %	63.8 %	63.4 %
Loss from operations	(8.5)%	(7.3)%	(9.5)%
Other income	2.5 %	1.4 %	0.5 %
Net loss	(6.0)%	(5.9)%	(9.1)%

The following table sets forth our consolidated revenues by geographic location for the years ended December 31, 2018 , 2017 , and 2016 .

	Years ended December 31,		
	2018	2017	2016
	(in thousands)		
Revenues:			
Canada	$ 70,774	$ 48,107	$ 26,893
United States	755,454	478,286	284,095
United Kingdom	69,596	44,590	25,958
Australia	47,937	31,625	18,163
Rest of World	129,468	70,696	34,221
Total Revenues	$ 1,073,229	$ 673,304	$ 389,330

The following table sets forth our consolidated revenues by geographic location as a percentage of total revenues for the years ended December 31, 2018 , 2017 , and 2016 .

	Years ended December 31,		
	2018	2017	2016
Revenues:			
Canada	6.6%	7.2%	6.9%
United States	70.4%	71.0%	72.9%
United Kingdom	6.5%	6.6%	6.7%
Australia	4.5%	4.7%	4.7%
Rest of World	12.0%	10.5%	8.8%
Total Revenues	100.0%	100.0%	100.0%

Discussion of the Results of Operations for the years ended December 31, 2018 , 2017 , and 2016

Revenues

	Years ended December 31,			2018 vs 2017	2017 vs 2016
	2018	2017	2016	% Change	% Change
	(in thousands, except percentages)				
Revenues:					
Subscription solutions	$ 464,996	$ 310,031	$ 188,606	50.0%	64.4%
Merchant solutions	608,233	363,273	200,724	67.4%	81.0%
	$ 1,073,229	$ 673,304	$ 389,330	59.4 %	72.9 %
Percentage of revenues:					
Subscription solutions	43.3 %	46.0 %	48.4 %		
Merchant solutions	56.7 %	54.0 %	51.6 %		
Total revenues	100.0 %	100.0 %	100.0 %		

Subscription Solutions

Subscription solutions revenues increased $ 155.0 million , or 50.0% , for the year ended December 31, 2018 compared to the same period in 2017 . Subscription solutions revenues increased $ 121.4 million , or 64.4% , for the year ended December 31, 2017 compared to the same period in 2016. The increase in both periods was primarily a result of growth in MRR driven by the higher number of merchants using our platform.

Merchant Solutions

Merchant solutions revenues increased $ 245.0 million , or 67.4% , for the year ended December 31, 2018 compared to the same period in 2017 . The increase in merchant solutions revenues was primarily a result of Shopify Payments revenue growing by $176.0 million, or 64.4%, in 2018 compared to the same period in 2017 . This increase was a result of an increase in the number of merchants using our platform, continued expansion into new geographical regions, and an increase in adoption of Shopify Payments by our merchants, which drove $6.6 billion of additional GMV facilitated using Shopify Payments in 2018 compared to the same period in 2017 . As at December 31, 2018 Shopify Payments adoption among our merchants was as follows: United States, 91%; Canada, 90%; Australia, 85%; United Kingdom, 84%; Ireland, 75%; New Zealand, 65%; and other countries where Shopify Payments is available, 46%. Additionally, revenue from transaction fees and referral fees from partners increased by $22.5 million, or 59.6%, and $20.1 million, or 78.9%, respectively, during the year ended December 31, 2018 as a result of the increase in non-Payments GMV facilitated through our platform compared to the same period in 2017 . Shopify Capital grew by $14.9 million, or 117.6%, driven by the increase in number and amounts of advances and loans, and Shopify Shipping grew by $10.1 million, or 100.5%, driven by the increase in the number of merchants using this service, during the year ended December 31, 2018 .

Merchant solutions revenues increased $ 162.5 million , or 81.0% , for the year ended December 31, 2017 compared to the same period in 2016. The increase in merchant solutions revenues was primarily a result of Shopify Payments revenue growing by $111.1 million, or 68.5%, transaction fees growing by $18.0 million, or 91.6%, referral fees from partners growing by $16.1 million, or 172.2%, and Shopify Capital and Shopify Shipping combining for growth of $17.1 million, or 304.0%.

Cost of Revenues

	Years ended December 31,			2018 vs 2017	2017 vs 2016
	2018	2017	2016	% Change	% Change
	(in thousands, except percentages)				
Cost of revenues:					
Cost of subscription solutions	$ 100,990	$ 61,267	$ 39,478	64.8 %	55.2 %
Cost of merchant solutions	375,972	231,784	140,357	62.2 %	65.1 %
Total cost of revenues	$ 476,962	$ 293,051	$ 179,835	62.8 %	63.0 %
Percentage of revenues:					
Cost of subscription solutions	9.4 %	9.1 %	10.1 %		
Cost of merchant solutions	35.0 %	34.4 %	36.1 %		
	44.4 %	43.5 %	46.2 %		

Cost of Subscription Solutions

Cost of subscription solutions increased $39.7 million , or 64.8% , for the year ended December 31, 2018 compared to the same period in 2017 . The increase was primarily due to higher third-party infrastructure and hosting costs. The increase was also due to an increase in costs necessary to support a greater number of merchants using our platform, resulting in an increase in: employee-related costs, credit card fees for processing merchant billings, payments to third-party partners for the registration of domain names, and payments to third-party theme developers. As a percentage of revenues, costs of subscription solutions increased from 9.1% in 2017 to 9.4% in 2018 due to increasing the functionality and flexibility of our hosting infrastructure by outsourcing it to a third-party.

Cost of subscription solutions increased $ 21.8 million , or 55.2% , for the year ended December 31, 2017 compared to the same period in 2016. The increase was primarily due to an increase in the costs necessary to support a greater number of merchants using our platform.

Cost of Merchant Solutions

Cost of merchant solutions increased $144.2 million , or 62.2% , for the year ended December 31, 2018 compared to the same period in 2017 . The increase was primarily due to the increase in GMV facilitated through Shopify Payments, which resulted in higher payment processing and interchange fees. The increase was also due to higher product costs associated with expanding our product offerings. The overall increase in sales of merchant solutions also resulted in higher credit card fees for processing merchant billings. Cost of merchant solutions as a percentage of revenues increased from 34.4% in 2017 to 35.0% in 2018 , mainly as a result of Shopify Payments representing a larger percentage of total revenue.

Cost of merchant solutions increased $ 91.4 million , or 65.1% , for the year ended December 31, 2017 compared to the same period in 2016. The increase was primarily due to the increase in GMV facilitated through Shopify Payments, which resulted in payment processing fees, including interchange fees, increasing for the year ended December 31, 2017 as compared to the same period in 2016.

Gross Profit

	Years ended December 31,			2018 vs 2017	2017 vs 2016
	2018	2017	2016	% Change	% Change
	(in thousands, except percentages)				
Gross profit	$ 596,267	$ 380,253	$ 209,495	56.8 %	81.5 %
Percentage of total revenues	55.6 %	56.5 %	53.8 %		

Gross profit increased $216.0 million , or 56.8% , for the year ended December 31, 2018 compared to the same period in 2017 . As a percentage of total revenues, gross profit decreased from 56.5% in the year ended December 31, 2017 to 55.6% in the year ended December 31, 2018 , due to Shopify Payments representing a larger percentage of total revenue, increasing the functionality and flexibility of our hosting infrastructure, and higher product costs associated with expanding our product offerings. This was partly offset by the relative growth of higher-margin merchant solutions products, namely referral fees from partners, Shopify Capital, and Shopify Shipping.

Gross profit increased $ 170.8 million , or 81.5% , for the year ended December 31, 2017 compared to the same period in 2016. As a percentage of total revenues, gross profit increased from 53.8% in the year ended December 31, 2016 to 56.5% in the year ended December 31, 2017, due to the impact of increased margins on Shopify Payments and the relative growth of higher-margin merchant solutions products, namely referral fees from partners, Shopify Capital, and Shopify Shipping.

Operating Expenses

Sales and Marketing

	Years ended December 31,			2018 vs 2017	2017 vs 2016
	2018	2017	2016	% Change	% Change
	(in thousands, except percentages)				
Sales and marketing	$ 350,069	$ 225,694	$ 129,214	55.1 %	74.7 %
Percentage of total revenues	32.6 %	33.5 %	33.2 %		

Sales and marketing expenses increased $124.4 million , or 55.1% , for the year ended December 31, 2018 compared to the same period in 2017 , due to an increase of $80.7 million in employee-related costs ($14.1 million of which related to stock-based compensation and related payroll taxes) to support the growth of the business including in Shopify Plus and International. Expenditures on marketing programs to support the growth of our business, such as advertisements on search engines and social media, as well as payments to partners, increased by $39.7 million. Computer hardware and software costs increased by $4.0 million, largely due to the growth in sales and marketing headcount.

Sales and marketing expenses increased $ 96.5 million , or 74.7% , for the year ended December 31, 2017 compared to the same period in 2016, primarily due to an increase of $48.3 million in marketing programs. In addition to external marketing spending, employee-related costs increased by $42.8 million.

Research and Development

	Years ended December 31,			2018 vs 2017	2017 vs 2016
	2018	2017	2016	% Change	% Change
	(in thousands, except percentages)				
Research and development	$ 230,674	$ 135,997	$ 74,336	69.6 %	82.9 %
Percentage of total revenues	21.5 %	20.2 %	19.1 %		

Research and development expenses increased $94.7 million , or 69.6% , for the year ended December 31, 2018 compared to the same period in 2017 , due to an increase of $89.6 million in employee-related costs ($24.7 million of which related to stock-based compensation and related payroll taxes), a $3.1 million increase in computer hardware and software costs, and a $2.0 million increase in professional services fees, all as a result of growth in our research and development employee base and expanded development programs.

Research and development expenses increased $ 61.7 million , or 82.9% , for the year ended December 31, 2017 compared to the same period in 2016, due to an increase of $57.6 million in employee-related costs and an increase of $3.5 million in software license costs as a result of the growth in both our business and headcount.

General and Administrative

	Years ended December 31,			2018 vs 2017	2017 vs 2016
	2018	2017	2016	% Change	% Change
	(in thousands, except percentages)				
General and administrative	$ 107,444	$ 67,719	$ 43,110	58.7 %	57.1 %
Percentage of total revenues	10.0 %	10.1 %	11.1 %		

General and administrative expenses increased $39.7 million , or 58.7% , for the year ended December 31, 2018 compared to the same period in 2017 , due to an increase of $30.3 million in employee-related costs ($8.6 million of which related to stock-based compensation and related payroll taxes), a $4.5 million increase in professional services fees for legal and tax services, including those related to our international expansion and the growth of our business, a $4.0 million increase in finance costs, which includes insurance, sales and use and other value added taxes, and bank fees, and a $1.7 million increase in computer and software costs. These increases were offset by a $0.8 million decrease in MCA, loans and Shopify Payments costs due to improved operational performance around underwriting.

General and administrative expenses increased $ 24.6 million , or 57.1% , for the year ended December 31, 2017 compared to the same period in 2016, due to an increase of $13.6 million in employee-related costs, a $4.9 million increase in actual and expected losses associated with Shopify Payments and Shopify Capital, a $4.8 million increase in finance costs, which includes insurance, listing fees, and board expenses, and a $1.0 million increase in professional services fees.

Other Income (Expenses)

	Years ended December 31,			2018 vs 2017	2017 vs 2016
	2018	2017	2016	% Change	% Change
	(in thousands, except percentages)				
Other income (expenses), net	$ 27,367	$ 9,162	$ 1,810	*	*

* Not a meaningful comparison

In the year ended December 31, 2018 we had other income of $27.4 million compared to other income of $9.2 million in the same period in 2017 , a positive change of $18.2 million. The increase was driven primarily by $21.6 million higher interest income from investments due to our higher cash, cash equivalents, and marketable securities balances. The remaining difference is from foreign exchange losses.

Other income increased by $ 7.4 million in the year ended December 31, 2017 compared to the same period in 2016. The increase was driven primarily by an increase in interest income from investments of $6.4 million. The remainder of the increase came from foreign exchange gains.

Profit (Loss)

	Years ended December 31,			2018 vs 2017	2017 vs 2016
	2018	2017	2016	% Change	% Change
	(in thousands, except share and per share data)				
Net loss	$ (64,553)	$ (39,995)	$ (35,355)	*	*
Basic and diluted net loss per share attributable to shareholders	$ (0.61)	$ (0.42)	$ (0.42)		
Weighted average shares used to compute basic and diluted net loss per share attributable to shareholders	105,671,839	95,774,897	83,988,597		

* Not a meaningful comparison

Basic and diluted net loss per share attributable to shareholders for the year ended December 31, 2018 increased by $(0.19) compared to the same period in 2017. This is due to our continued investments, which aim to increase our revenue base, improve the retention of this base, and strengthen our ability to increase sales to our merchants in order to drive future growth. Basic and diluted net loss per share attributable to shareholders was consistent for the years ended December 31, 2017 and 2016.

Quarterly Results of Operations

The following table sets forth our results of operations for the three months ended December 31, 2018 and 2017 .

	Three months ended December 31,	
	2018	2017
	(in thousands, except share and per share data)	
Revenues:		
Subscription solutions	$ 133,560	$ 93,918
Merchant solutions	210,302	128,896
	343,862	222,814
Cost of revenues (1) :		
Subscription solutions	26,706	19,867
Merchant solutions	131,413	81,802
	158,119	101,669
Gross profit	185,743	121,145
Operating expenses:		
Sales and marketing (1)	95,163	67,174
Research and development (1)	67,024	40,339
General and administrative (1)	33,014	19,745
Total operating expenses	195,201	127,258
Loss from operations	(9,458)	(6,113)
Other income:		
Interest income, net	9,265	2,966
Foreign exchange gain (loss)	(1,321)	160
	7,944	3,126
Net loss	$ (1,514)	$ (2,987)
Basic and diluted net loss per share attributable to shareholders	$ (0.01)	$ (0.03)
Weighted average shares used to compute basic and diluted net loss per share attributable to shareholders	107,734,499	99,551,791

(1) Includes stock-based compensation expense and related payroll taxes as follows:

	Three months ended December 31,	
	2018	2017
	(in thousands)	
Cost of revenues	$ 660	$ 370
Sales and marketing	6,641	3,182
Research and development	16,769	10,843
General and administrative	5,356	3,302
	$ 29,426	$ 17,697

Revenues

	Three months ended December 31,		2018 vs. 2017
	2018	2017	% Change
	(in thousands, except percentages)		
Revenues:			
Subscription solutions	$ 133,560	$ 93,918	42.2%
Merchant solutions	210,302	128,896	63.2%
	$ 343,862	$ 222,814	54.3 %
Percentage of revenues:			
Subscription solutions	38.8 %	42.2 %	
Merchant solutions	61.2 %	57.8 %	
Total revenues	100.0 %	100.0 %	

Subscription Solutions

Subscription solutions revenues increased $39.6 million , or 42.2% , for the three months ended December 31, 2018 compared to the same period in 2017 . The period over period increase was primarily a result of growth in MRR, which was driven largely by the higher number of merchants using our platform.

Merchant Solutions

Merchant solutions revenues increased $81.4 million , or 63.2% , for the three months ended December 31, 2018 compared to the same period in 2017 . The increase in merchant solutions revenues was primarily a result of Shopify Payments revenue growing in the three months ended December 31, 2018 compared to the same period in 2017 . This increase was a result of an increase in the number of merchants using our platform, continued expansion into new geographical regions, and an increase in our Shopify Payments penetration rate, which was 41.5% , resulting in GMV of $5.8 billion that was facilitated using Shopify Payments for the three months ended December 31, 2018 . This compares to a penetration rate of 38.5% resulting in GMV of $3.5 billion that was facilitated using Shopify Payments in the same period in 2017 .

In addition to the increase in revenue from Shopify Payments, revenue from transaction fees, referral fees from partners, Shopify Capital, and Shopify Shipping increased during the three months ended December 31, 2018 compared to the same periods in 2017 , as a result of the increase in GMV facilitated through our platform compared to the same period in 2017 .

Cost of Revenues

	Three months ended December 31,		2018 vs. 2017
	2018	2017	% Change
	(in thousands, except percentages)		
Cost of revenues:			
Cost of subscription solutions	$ 26,706	$ 19,867	34.4 %
Cost of merchant solutions	131,413	81,802	60.6 %
Total cost of revenues	$ 158,119	$ 101,669	55.5 %
Percentage of revenues:			
Cost of subscription solutions	7.8 %	8.9 %	
Cost of merchant solutions	38.2 %	36.7 %	
	46.0 %	45.6 %	

Cost of Subscription Solutions

Cost of subscription solutions increased $6.8 million , or 34.4% , for the three months ended December 31, 2018 compared to the same period in 2017 . The increase was primarily due to higher third-party infrastructure and hosting costs. The increase was also due to an increase in the costs necessary to support a greater number of merchants using our platform, resulting in an increase in: employee-related costs, credit card fees for processing merchant billings, amortization related to newly launched platform enhancements, payments to third-party partners for the registration of domain names, and payments to third-party theme developers. As a percentage of revenues, cost of subscription solutions decreased from 8.9% in the three months ended December 31, 2017 to 7.8% in the three months ended December 31, 2018 due to a decrease in employee-related costs relative to subscription solutions revenue.

Cost of Merchant Solutions

Cost of merchant solutions increased $ 49.6 million , or 60.6% , for the three months ended December 31, 2018 compared to the same period in 2017 . The increase was primarily due to the increase in GMV facilitated through Shopify Payments, which resulted in higher payment processing and interchange fees. The increase was also due to an increase in credit card fees for processing merchant billings. Cost of merchant solutions as a percentage of revenues increased from 36.7% in the three months ended December 31, 2017 to 38.2% in the three months ended December 31, 2018 , mainly as a result of Shopify Payments representing a larger percentage of total revenue.

Gross Profit

	Three months ended December 31,		2018 vs. 2017
	2018	2017	% Change
	(in thousands, except percentages)		
Gross profit	$ 185,743	$ 121,145	53.3 %
Percentage of total revenues	54.0 %	54.4 %	

Gross profit increased $64.6 million , or 53.3% , for the three months ended December 31, 2018 compared to the same period in 2017 . As a percentage of total revenues, gross profit decreased from 54.4% in the three months ended December 31, 2017 to 54.0% in the three months ended December 31, 2018 , principally due to Shopify Payments representing a larger percentage of total revenue, which was partly offset by the relative growth of higher-margin merchant solutions products, namely referral fees from partners, Shopify Capital, and Shopify Shipping as well as lower third-party infrastructure and hosting costs relative to our revenues resulting from optimization efforts and lower employee-related costs.

Operating Expenses

Sales and Marketing

	Three months ended December 31,		2018 vs. 2017
	2018	2017	% Change
	(in thousands, except percentages)		
Sales and marketing	$ 95,163	$ 67,174	41.7 %
Percentage of total revenues	27.7 %	30.1 %	

Sales and marketing expenses increased $28.0 million , or 41.7% , for the three months ended December 31, 2018 compared to the same period in 2017 , due to an increase of $18.1 million in employee-related costs ($3.4 million of which related to stock-based compensation and related payroll taxes), an increase of $10.2 million in marketing programs, such as advertisements on search engines and social media, as well as payments to partners, all of which support the growth of our business, and an increase of $0.8 million related to computer hardware and software. These increases were offset by a $1.1 million decrease in consulting services.

Research and Development

	Three months ended December 31,		2018 vs. 2017
	2018	2017	% Change
	(in thousands, except percentages)		
Research and development	$ 67,024	$ 40,339	66.2 %
Percentage of total revenues	19.5 %	18.1 %	

Research and development expenses increased $26.7 million , or 66.2% , for the three months ended December 31, 2018 compared to the same period in 2017 , due to an increase of $25.0 million in employee-related costs ($5.8 million of which related to stock-based compensation and related payroll taxes), a $1.1 million increase in computer hardware and software costs, and a $0.6 million increase in professional services fees, all as a result of the growth in our employee base and expanded development programs.

General and Administrative

	Three months ended December 31,		2018 vs. 2017
	2018	2017	% Change
	(in thousands, except percentages)		
General and administrative	$ 33,014	$ 19,745	67.2 %
Percentage of total revenues	9.6 %	8.9 %	

General and administrative expenses increased $13.3 million , or 67.2% , for the three months ended December 31, 2018 compared to the same period in 2017 , due to an increase of $7.9 million in employee-related costs ($2.1 million of which related to stock-based compensation and related payroll taxes), a $1.9 million increase in professional services fees for legal and tax services, a $1.6 million increase in finance costs, which includes insurance, sales and use and other value added taxes, and bank fees, a $1.5 million increase in losses and insurance costs related to Shopify Payments and Shopify Capital, and a $0.4 million increase in computer and software costs.

Other Income (Expenses)

	Three months ended December 31,		2018 vs. 2017
	2018	2017	% Change
	(in thousands, except percentages)		
Other income (expenses), net	$ 7,944	$ 3,126	*

* Not a meaningful comparison

In the three months ended December 31, 2018 we had other income of $7.9 million , compared to other income of $3.1 million in the same period in 2017 . The increase was driven mainly by an increase in interest income of $6.3 million, primarily as a result of our increased cash, cash equivalents and marketable securities balances. This was slightly offset by the fact that the foreign exchange gain of $0.2 million in 2017 changed to a foreign exchange loss of $1.3 million in 2018, resulting in a decrease of $1.5 million.

Summary of Quarterly Results

The following table sets forth selected unaudited quarterly results of operations data for each of the eight quarters ended December 31, 2018 . The information for each of these quarters has been derived from unaudited condensed consolidated financial statements that were prepared on the same basis as the audited annual financial statements and, in the opinion of management, reflects all adjustments, which includes only normal recurring adjustments, necessary for the fair presentation of the results of operations for these periods in accordance with U.S. GAAP. This data should be read in conjunction with our unaudited condensed consolidated financial statements and audited consolidated financial statements and related notes for the relevant period. These quarterly operating results are not necessarily indicative of our operating results for a full year or any future period.

	Three months ended							
	Dec 31, 2018	Sep 30, 2018	June 30, 2018	Mar 31, 2018	Dec 31, 2017	Sep 30, 2017	June 30, 2017	Mar 31, 2017
	(in thousands, except per share data)							
Revenues:								
Subscription solutions	$ 133,560	$ 120,517	$ 110,721	$ 100,198	$ 93,918	$ 82,435	$ 71,598	$ 62,080
Merchant solutions	210,302	149,547	134,242	114,142	128,896	89,021	80,057	65,299
	343,862	270,064	244,963	214,340	222,814	171,456	151,655	127,379
Cost of revenues: [(1)]								
Subscription solutions	26,706	$ 26,600	$ 24,524	23,160	19,867	15,458	13,688	12,254
Merchant solutions	131,413	93,737	83,484	67,338	81,802	55,971	51,127	42,884
	158,119	120,337	108,008	90,498	101,669	71,429	64,815	55,138
Gross profit	185,743	149,727	136,955	123,842	121,145	100,027	86,840	72,241
Operating expenses:								
Sales and marketing [(1)]	95,163	91,635	87,487	75,784	67,174	58,314	54,872	45,334
Research and development [(1)]	67,024	61,629	54,305	47,716	40,339	36,350	32,714	26,594
General and administrative [(1)]	33,014	27,831	25,924	20,675	19,745	18,039	15,161	14,774
Total operating expenses	195,201	181,095	167,716	144,175	127,258	112,703	102,747	86,702
Loss from operations	(9,458)	(31,368)	(30,761)	(20,333)	(6,113)	(12,676)	(15,907)	(14,461)
Other income	7,944	8,184	6,808	4,431	3,126	3,296	1,877	863
Net loss	$ (1,514)	$ (23,184)	$ (23,953)	$ (15,902)	$ (2,987)	$ (9,380)	$ (14,030)	$ (13,598)
Basic and diluted net loss per share attributable to shareholders	$ (0.01)	$ (0.22)	$ (0.23)	$ (0.16)	$ (0.03)	$ (0.09)	$ (0.15)	$ (0.15)

(1) Includes stock-based compensation expense and related payroll taxes as follows:

	Three months ended							
	Dec 31, 2018	Sep 30, 2018	June 30, 2018	Mar 31, 2018	Dec 31, 2017	Sep 30, 2017	June 30, 2017	Mar 31, 2017
	(in thousands)							
Cost of revenues	$ 660	$ 655	$ 637	$ 489	$ 370	$ 355	$ 307	$ 249
Sales and marketing	6,641	6,397	6,249	4,769	3,182	2,729	2,305	1,660
Research and development	16,769	15,669	15,221	11,916	10,843	9,324	8,075	6,318
General and administrative	5,356	5,007	4,386	2,941	3,302	1,981	2,282	1,920
	$ 29,426	$ 27,728	$ 26,493	$ 20,115	$ 17,697	$ 14,389	$ 12,969	$ 10,147

The following table sets forth selected unaudited quarterly statements of operations data as a percentage of total revenues for each of the eight quarters ended December 31, 2018 .

	Three months ended							
	Dec 31, 2018	Sep 30, 2018	June 30, 2018	Mar 31, 2018	Dec 31, 2017	Sep 30, 2017	June 30, 2017	Mar 31, 2017
Revenues								
Subscription solutions	38.8 %	44.6 %	45.2 %	46.7 %	42.2 %	48.1 %	47.2 %	48.7 %
Merchant solutions	61.2 %	55.4 %	54.8 %	53.3 %	57.8 %	51.9 %	52.8 %	51.3 %
	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Cost of revenues								
Subscription solutions	7.8 %	9.8 %	10.0 %	10.8 %	8.9 %	9.0 %	9.0 %	9.6 %
Merchant solutions	38.2 %	34.7 %	34.1 %	31.4 %	36.7 %	32.6 %	33.7 %	33.7 %
	46.0 %	44.5 %	44.1 %	42.2 %	45.6 %	41.6 %	42.7 %	43.3 %
Gross profit	54.0 %	55.4 %	55.9 %	57.8 %	54.4 %	58.4 %	57.3 %	56.7 %
Operating expenses:								
Sales and marketing	27.7 %	33.9 %	35.7 %	35.4 %	30.1 %	34.0 %	36.2 %	35.6 %
Research and development	19.5 %	22.8 %	22.2 %	22.3 %	18.1 %	21.2 %	21.6 %	20.9 %
General and administrative	9.6 %	10.3 %	10.6 %	9.6 %	8.9 %	10.5 %	10.0 %	11.6 %
	56.8 %	67.0 %	68.5 %	67.3 %	57.1 %	65.7 %	67.8 %	68.1 %
Loss from operations	(2.8)%	(11.6)%	(12.6)%	(9.5)%	(2.7)%	(7.4)%	(10.5)%	(11.4)%
Other income	2.3 %	3.0 %	2.8 %	2.1 %	1.4 %	1.9 %	1.2 %	0.7 %
Net loss	(0.4)%	(8.6)%	(9.8)%	(7.4)%	(1.3)%	(5.5)%	(9.3)%	(10.7)%

We believe that year-over-year comparisons are more meaningful than our sequential results due to seasonality in our business. While we believe that this seasonality has affected and will continue to affect our quarterly results, our rapid growth has largely masked seasonal trends to date. Our merchant solutions revenues are directionally correlated with our merchants' GMV. Our merchants' GMV typically increases during the holiday season. As a result, we have historically generated higher merchant solutions revenues in our fourth quarter than in other quarters. As a result of the continued growth of our merchant solutions offerings, we believe that our business may become more seasonal in the future, and that historical patterns in our business may not be a reliable indicator of our future performance.

Quarterly Revenue and Gross Margin Trends

Revenues experienced a seasonal decrease in our first quarters as buyers typically reduce their spending following the holiday season resulting in a seasonal decrease in GMV per merchant, which was not completely offset by merchant and MRR growth. Subsequently, revenues have increased each remaining quarter as a result of merchant, MRR, and overall GMV growth. Our merchants have processed additional GMV during the fourth quarter holiday seasons, and as a result we have generated higher merchant solutions revenues in our fourth quarters compared to other quarters.

As a result of the continued growth of our merchant solutions offerings, we believe that our business may become more seasonal in the future.

Our gross margin percentage has varied over the past eight quarters and is generally driven by the mix between our higher margin subscription solutions revenue and lower margin merchant solutions revenue. While our total revenues have increased in recent periods, the mix has shifted towards merchant solutions revenue, most notably in the fourth quarter due to higher holiday volume of orders facilitated and the resulting Shopify Payments revenue during this period. We expect this overall trend to continue over time.

Quarterly Operating Expenses Trends

Total operating expenses have increased sequentially for each period presented primarily due to the addition of personnel in connection with the expansion of our business as well as additional marketing initiatives to attract potential merchants.

Key Balance Sheet Information

	December 31, 2018	December 31, 2017
	(in thousands)	
Cash, cash equivalents and marketable securities	$ 1,969,670	$ 938,039
Total assets	2,254,785	1,113,564
Total liabilities	164,017	112,464
Total non-current liabilities	25,329	17,710

Total assets increased $1,141.2 million as at December 31, 2018 compared to December 31, 2017 , principally due to our two offerings of Class A subordinate voting shares, which closed in February and December 2018. The offerings raised, net of commissions and offering expenses, $1,041.7 million of cash, which has been subsequently used to purchase marketable securities. The increase in total assets was also driven by a $44.8 million increase in merchant cash advances and loans receivable. Total liabilities increased by $51.6 million , principally as a result of an increase in accounts payable and accrued liabilities of $34.4 million, which was due to an increase in foreign exchange forward contract liabilities, payment processing and interchange fees, payroll liabilities, third-party infrastructure costs, and costs related to marketing. The growth in sales of our subscription solutions offering resulted in an increase of deferred revenue of $9.0 million. Construction related to our new offices led to an increase in lease incentive liabilities of $8.4 million.

Liquidity and Capital Resources

To date, we have financed our operations primarily through the sale of equity securities, raising approximately $2.0 billion, net of issuance costs, from investors.

In May 2017, the Company completed a public offering, in which it issued and sold 5,500,000 Class A subordinate voting shares at a public offering price of $91.00 per share. Subsequently, in June 2017, the Company issued and sold 825,000 Class A subordinate voting shares at the same price as a result of the underwriters' exercise of their over-allotment option. The Company received total net proceeds of $560.1 million after deducting underwriting discounts and commissions of $14.4 million and other offering expenses of $1.1 million.

In February 2018, the Company completed a public offering, in which it issued and sold 4,800,000 Class A subordinate voting shares at a public offering price of $137.00 per share. The Company received total net proceeds of $647.0 million after deducting offering fees and expenses of $10.6 million .

In July 2018, due to the expiry of our previous short-form base shelf prospectus, we filed a new short-form base shelf prospectus with the Securities Commissions in each of the provinces and territories of Canada, except Quebec, and a corresponding shelf registration statement on Form F-10 with the U.S. Securities and Exchange Commission. The shelf prospectus and registration statement allow Shopify to offer up to $5.0 billion of Class A subordinate voting shares, preferred shares, debt securities, warrants, subscription receipts, units, or any combination thereof, from time to time during the 25-month period that the shelf prospectus is effective.

In December 2018, the Company completed a public offering, in which it issued and sold 2,600,000 Class A subordinate voting shares at a public offering price of $154.00 per share. The Company received total net proceeds of $394.7 million after deducting offering fees and expenses of $5.7 million .

Our principal cash requirements are for working capital and capital expenditures. Excluding current deferred revenue, working capital at December 31, 2018 was $2,029.6 million . Given the ongoing cash generated from operations and our existing cash and cash equivalents, we believe there is sufficient liquidity to meet our current and planned financial obligations over the next 12 months. Our future financing requirements will depend on many factors including our growth rate, subscription renewal activity, the timing and extent of spending to support development of our platform and the expansion of sales and marketing activities. Although we currently are not a party to any material undisclosed agreement and do not have any understanding with any third-parties with respect to potential material investments in, or acquisitions of, businesses or technologies, we may enter into these types of arrangements in the future, which could also require us to seek additional equity or debt financing. Additional funds may not be available on terms favorable to us or at all.

Cash, Cash Equivalents and Marketable Securities

Cash, cash equivalents, and marketable securities increased by $1,031.6 million to $1,969.7 million as at December 31, 2018 from $ 938.0 million as at December 31, 2017 , primarily as a result of our February and December 2018 public offerings.

Cash equivalents and marketable securities include money market funds, repurchase agreements, term deposits, U.S. and Canadian federal bonds, corporate bonds, and commercial paper, all maturing within the 12 months from December 31, 2018 .

The following table summarizes our total cash, cash equivalents and marketable securities as at December 31, 2018 and 2017 as well as our operating, investing and financing activities for the twelve months ended December 31, 2018 and 2017 :

	Years ended December 31, 2018	2017
	(in thousands)	
Cash, cash equivalents and marketable securities (end of year)	$ 1,969,670	$ 938,039
Net cash provided by (used in):		
Operating activities	$ 9,324	$ 7,901
Investing activities	(810,633)	(527,170)
Financing activities	1,072,182	574,831
Effect of foreign exchange on cash and cash equivalents	(1,867)	2,102
Net increase in cash and cash equivalents	269,006	57,664
Change in marketable securities	762,625	487,961
Net increase in cash, cash equivalents and marketable securities	$ 1,031,631	$ 545,625

Cash Flows From Operating Activities

Our largest source of operating cash is from subscription solutions. These payments are typically paid to us at the beginning of the applicable subscription period, except for our Shopify Plus merchants who typically pay us at the end of their monthly billing cycle. We also generate significant cash flows from our Shopify Payments processing fee arrangements, which are received on a daily basis as transactions are processed. Our primary uses of cash from operating activities are for third-party payment processing fees, employee-related expenditures, advancing funds to merchants through Shopify Capital, marketing programs, third-party shipping partners, outsourced hosting costs, and leased facilities.

For the year ended December 31, 2018 , cash provided by operating activities was $9.3 million . This was primarily as a result of our net loss of $64.6 million , which once adjusted for $95.7 million of stock-based compensation expense, $27.1 million of amortization and depreciation, a $5.9 million increase of our provision for uncollectible merchant cash advances and loans, and an unrealized foreign exchange loss of $1.3 million , contributed $65.4 million of positive cash flows. Additional cash of $38.1 million resulted from the following increases in operating liabilities: $20.6 million in accounts payable and accrued liabilities due to foreign exchange forward contract liabilities, payment processing and interchange fees, payroll liabilities, third-party infrastructure costs, and costs related to marketing; $9.0 million in deferred revenue due to the growth in sales of our subscription solutions; and $8.4 million in lease incentives related to ongoing construction at our new offices. These were offset by $94.2 million of cash used resulting from the following increases in operating assets: $50.7 million in merchant cash advances and loans as we continue to grow Shopify Capital; $32.6 million in trade and other receivables, and $10.8 million in other current assets driven primarily by an increase in deposits and prepaid expenses.

For the year ended December 31, 2017 , cash provided by operating activities was $7.9 million . This was primarily as a result of our net loss of $40.0 million , which once adjusted for $49.2 million of stock-based compensation expense, $23.4 million of amortization and depreciation, a $2.6 million increase of our provision for uncollectible merchant cash advances, and an unrealized foreign exchange gain of $1.6 million , contributed $33.6 million of positive cash flows. Additional cash of $28.9 million resulted from the following increases in operating liabilities: $15.4 million in accounts payable and accrued liabilities; $11.0 million in deferred revenue; and $2.5 million in lease incentives. These were offset by $54.6 million of cash used resulting from the following increases in operating assets: $37.8 million in merchant cash advances; $13.0 million in trade and other receivables; and $3.7 million in other current assets.

Cash Flows From Investing Activities

Cash flows used in investing activities are primarily related to the purchase and sale of marketable securities, purchases of computer equipment, leasehold improvements and furniture and fixtures to support our expanding infrastructure and workforce, software development costs eligible for capitalization, and business acquisitions.

Net cash used in investing activities in the year ended December 31, 2018 was $ 810.6 million , which was driven by net purchases of $749.7 million in marketable securities, $ 28.0 million used to purchase property and equipment, which primarily consisted of expenditures on leasehold improvements, $13.6 million used for purchasing and developing software to add functionality to our platform and support our expanding merchant base, and $19.4 million used to make business acquisitions.

Net cash used in investing activities in the year ended December 31, 2017 was $ 527.2 million , reflecting net purchases of $487.2 million in marketable securities. Cash used in investing activities also included $20.0 million used to purchase property and equipment, which primarily consisted of expenditures on leasehold improvements and equipment used in our data centers, $4.2 million used towards the development of software, and $15.7 million used to make a business acquisition.

Cash Flows From Financing Activities

To date, cash flows from financing activities have related to proceeds from private placements, public offerings, and exercises of stock options.

Net cash provided by financing activities in the year ended December 31, 2018 was $ 1,072.2 million driven by the $1,041.7 million raised by our February and December 2018 public offerings, and $30.5 million in proceeds from the issuance of Class A subordinate voting shares and Class B multiple voting shares as a result of stock option exercises. This compares to $574.8 million for the same period in 2017 of which $560.1 million was raised by our May 2017 public offering while the remaining $14.8 million related to stock option exercises.

Contractual Obligations and Contingencies

Our principal commitments consist of obligations under our operating leases for office space. The following table summarizes our contractual obligations as of December 31, 2018 :

	Payments Due by Period				
	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years	Total
	(in thousands)				
Bank indebtedness	$ —	$ —	$ —	$ —	$ —
Operating lease and unconditional purchase obligations (1)	43,972	105,998	73,166	346,367	569,503
Total contractual obligations	$ 43,972	$ 105,998	$ 73,166	$ 346,367	$ 569,503

(1) Consists of payment obligations under our office leases as well as other unconditional purchase obligations.

Off-Balance Sheet Arrangements

We have no material off-balance sheet arrangements, other than operating leases and other unconditional purchase obligations (which have been disclosed under "Contractual Obligations and Contingencies").

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to a variety of risks, including foreign currency exchange fluctuations, changes in interest rates, concentration of credit and inflation. We regularly assess currency, interest rate and inflation risks to minimize any adverse effects on our business as a result of those factors.

Foreign Currency Exchange Risk

While the majority of our revenues are denominated in USD, a significant portion of operating expenses are incurred in CAD. As a result, our earnings are adversely affected by an increase in the value of the CAD relative to the USD. Foreign currency forward contracts are used to hedge against the earning effects of such fluctuations.

Effect of Foreign Exchange Rates

The following non-GAAP financial measure converts our revenues, cost of revenues, operating expenses, and loss from operations using the comparative period's monthly average exchange rates:

	Years ended December 31,			
	2018			2017
	GAAP Amounts As Reported	Exchange Rate Effect (1)	At Prior Year Monthly Rates (2)	GAAP Amounts As Reported
	(in thousands)			
Revenues	$ 1,073,229	$ 153	$ 1,073,382	$ 673,304
Cost of revenues	(476,962)	(36)	(476,998)	(293,051)
Operating expenses	(688,187)	(2,220)	(690,407)	(429,410)
Loss from operations	$ (91,920)	$ (2,103)	$ (94,023)	$ (49,157)

(1) Represents the increase or decrease in GAAP amounts reported resulting from using the comparative period's monthly average CAD-USD foreign exchange rates.

(2) Represents the outcome that would have resulted if monthly CAD-USD market rates from the prior reported period are applied to the current reporting period.

This effect of foreign exchange rates on our consolidated statements of operations disclosure is a supplement to our consolidated financial statements, which are prepared and presented in accordance with U.S. GAAP. We have provided the above non-GAAP disclosure as we believe it presents a clearer comparison of our period to period operating results by removing the impact of fluctuations in the CAD to USD exchange rate and to assist investors in understanding our financial and operating performance. Non-GAAP financial measures are not recognized measures for financial statement presentation under U.S. GAAP, do not have standardized meanings, and may not be comparable to similar measures presented by other public companies. Such non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, or superior to, the corresponding measures calculated in accordance with U.S. GAAP.

Interest Rate Sensitivity

We had cash, cash equivalents and marketable securities totaling $ 1,969.7 million as of December 31, 2018 . The cash and cash equivalents are held for operations and working capital purposes. Our investments are made for capital preservation purposes. We do not enter into investments for trading or speculative purposes.

Our cash equivalents and our portfolio of marketable securities are subject to market risk due to changes in interest rates. Fixed rate securities may have their market value adversely affected due to a rise in interest rates. Our future investment income may fall short of our expectations due to changes in interest rates or we may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in interest rates. However, because we classify our debt securities as "held to maturity," no gains or losses are recognized due to changes in interest rates unless such securities are sold prior to maturity or declines in fair value are determined to be other than temporary.

Concentration of Credit Risk

The Company's cash and cash equivalents, marketable securities, trade and other receivables, merchant cash advances and loans receivable, and foreign exchange derivative products subject the Company to concentrations of credit risk. Management mitigates this risk associated with cash and cash equivalents by making deposits and entering into foreign exchange derivative products only with large banks and financial institutions that are considered to be highly credit worthy. Management mitigates the risks associated with marketable securities by adhering to its investment policy, which stipulates minimum rating requirements, maximum investment exposures and maximum maturities. Due to the Company's diversified merchant base, there is no particular concentration of credit risk related to the Company's trade and other receivables and merchant cash advances and loans receivable. Trade and other receivables and merchant cash advances and loans receivable are monitored on an ongoing basis to ensure timely collection of amounts. The Company has mitigated some of the risks associated with Shopify Capital by entering into an agreement with a third party to insure merchant cash advances offered by Shopify Capital. There are no receivables from individual merchants accounting for 10% or more of revenues or receivables.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

Disclosure Controls and Procedures and Internal Control Over Financial Reporting

All control systems, no matter how well designed, have inherent limitations. Accordingly, even disclosure controls and procedures, and internal controls over financial reporting determined to be effective can only provide reasonable assurance of achieving their control objectives with respect to financial statement preparation and presentation.

Disclosure Controls and Procedures

Management of the Company, under the supervision of the Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining disclosure controls and procedures (as defined by the United States Securities and Exchange Commission ("SEC") in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act") for the Company to ensure that material information relating to the Company, including its consolidated subsidiaries, that is required to be made known to the Chief Executive Officer and Chief Financial Officer by others within the Company and disclosed by the Company in reports filed or submitted by it under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms; and (ii) accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

We, including the Chief Executive Officer and Chief Financial Officer, have evaluated the effectiveness of the Company's disclosure controls and procedures as of December 31, 2018 and have concluded that the Company's disclosure controls and procedures were effective as of December 31, 2018.

Management's Annual Report on Internal Control Over Financial Reporting

Management of the Company, under the supervision of the Chief Executive Officer and the Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over the Company's financial reporting. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with United States generally accepted accounting principles.

We, including the Chief Executive Officer and Chief Financial Officer, have assessed the effectiveness of the Company's internal control over financial reporting in accordance with Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment, we, including the Chief Executive Officer and Chief Financial Officer, have determined that the Company's internal control over financial reporting was effective as at December 31, 2018. Additionally, based on our assessment, we determined that there were no material weaknesses in the Company's internal control over financial reporting as at December 31, 2018.

The Company's Chief Executive Officer and Chief Financial Officer have certified the Company's annual report on Form 40-F for the year ended December 31, 2018, as required by Section 302 and Section 906 of the United States Sarbanes-Oxley Act of 2002 ("SOX"). The Company is relying on the statutory exemption contained in section 8.1 of National Instrument 52-109, "Certification of Disclosure in Issuers' Annual and Interim Filings", which allows it to file with the Canadian securities regulatory authorities the certificates required under SOX as soon as practicable after such certificates are filed with or furnished to the SEC.

The effectiveness of the Company's internal control over financial reporting as at December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report on the audited consolidated financial statements for December 31, 2018.

Changes in Internal Control Over Financial Reporting

During the year ended December 31, 2018, there were no significant changes in the Company's internal control over financial reporting, or any other factors that could significantly affect such internal control, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in accordance with U.S. GAAP. In the preparation of these consolidated financial statements, we are required to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. To the extent that there are material differences between these estimates and actual results, our financial condition or results of operations would be affected. We base our estimates on past experience and other assumptions that we believe are reasonable under the circumstances, and we re-evaluate these estimates on an ongoing basis. We refer to accounting estimates of this type as significant accounting policies and estimates, which we discuss below.

Revenue Recognition

Our sources of revenue consist of subscription solutions and merchant solutions. Arrangements with merchants do not provide the merchant with the right to take possession of the software supporting our hosting platform at any time and are therefore accounted for as service contracts. Our subscription service contracts do not provide for refunds or any other rights of return to merchants in the event of cancellations.

We recognize revenue to depict the transfer of promised services to merchants in an amount that reflects the consideration to which we expect to be entitled in exchange for those services by applying the following steps:

- Identify the contract with a merchant;
- Identify the performance obligations in the contract;
- Determine the transaction price;
- Allocate the transaction price; and
- Recognize revenue when, or as, we satisfy a performance obligation.

We follow the guidance provided in ASC 606-10, Principal versus Agent Considerations, for determining whether we should recognize revenue based on the gross amount billed to a merchant or the net amount retained. This determination is a matter of judgment that depends on the facts and circumstances of each arrangement. We recognize revenue from Shopify Shipping and the sales of apps on a net basis as we are not primarily responsible for the fulfillment and do not have control of the promised service, and therefore are the agent in the arrangement with merchants. All other revenue is reported on a gross basis, as we has determined we are the principal in the arrangement.

Capitalized Contract Costs

As part of obtaining contracts with certain merchants, the Company incurs upfront costs such as sales commissions. The Company capitalizes these contract costs, which are subsequently amortized on a systematic basis consistent with the pattern of the transfer of the good or service to which the contract asset relates, which is generally on a straight-line basis over the estimated life of the merchant relationship. In some instances, the Company applies the practical expedient that allows it to determine this estimate for a portfolio of contracts that have similar characteristics in terms of type of service, contract term and pricing. This estimate is reviewed by management at the end of each reporting period as additional information becomes available. For certain contracts where the amortization period of the contract costs would have been one year or less, the Company uses the practical expedient that allows it to recognize the incremental costs of obtaining those contracts as an expense when incurred and not consider the time value of money.

Income Taxes

Deferred tax assets and liabilities are determined based on the difference between the financial statement carrying amounts and the tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts that are more likely than not to be realized.

The Company evaluates tax positions taken or expected to be taken in the course of preparing tax returns to determine whether the tax positions have met a "more-likely-than-not" threshold of being sustained by the applicable tax authority. Tax benefits related to tax positions not deemed to meet the "more-likely-than-not" threshold are not permitted to be recognized in the consolidated financial statements.

Provision for Uncollectible Receivables Related to Merchant Cash Advances and Loans

Merchant cash advance receivables and loans represent the aggregate amount of Shopify Capital related receivables owed by merchants as of the consolidated balance sheet date, net of an allowance for uncollectible amounts. The Company estimates the allowance based on an assessment of various factors, including historical trends, merchants' gross merchandise volume, and other factors that may affect the merchants' ability to make future payments on the receivables. Additions to the allowance are reflected in current operating results, while charges against the allowance are made when losses are incurred. These additions are classified within general and administrative expenses on the Consolidated Statements of Operations and Comprehensive Loss. Recoveries are reflected as a reduction in the allowance for uncollectible receivables related to merchant cash advances and loans when the recovery occurs.

Accounting Pronouncements Adopted in the Year

In May 2014, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers. The new accounting standards update requires an entity to apply a five step model to recognize revenue to depict the transfer of promised goods and services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, as well as a cohesive set of disclosure requirements that would result in an entity providing comprehensive information about the nature, timing, and uncertainty of revenue and cash flows arising from an entity’s contracts with customers. In March 2016, the Financial Accounting Standards Board issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606), Principal versus Agent Considerations (Reporting Revenue Gross versus Net), updating the implementation guidance on principal versus agent considerations in the new revenue recognition standard. This update clarifies that an entity is a principal if it controls the specified good or service before that good or service is transferred to a customer. The update also includes indicators to assist an entity in determining whether it controls a specified good or service before it is transferred to the customer. In May 2016, the FASB issued ASU 2016-12, Narrow-Scope Improvements and Practical Expedients, which provides clarification on how to assess collectibility, present sales taxes, treat non-cash consideration, and account for completed and modified contracts at the time of transition. ASU 2016-12 also clarifies that an entity retrospectively applying the guidance in Topic 606 is not required to disclose the effect of the accounting change in the period of adoption.

The Company adopted this new revenue standard effective January 1, 2018, using the full retrospective method. There was no impact on previously reported results.

The most significant impact of adoption of the new revenue standard in the current year relates to the Company's accounting for incremental costs of obtaining a contract. Specifically, the Company is required to recognize as an asset the incremental sales commission costs of obtaining a contract with a merchant, if the Company expects to recover these costs. The contract assets are subsequently amortized on a systematic basis consistent with the pattern of the transfer of the good or service to which the asset relates to, which in the Company's case, is on a straight-line basis over the estimated life of the related merchant relationship. The adoption of the new revenue standard did not have an impact on the timing and amount of revenue recognition, or on cash from or used in operating, investing, or financing activities.

In January 2017, the Financial Accounting Standards Board issued ASU No. 2017-04, Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment, which simplifies the subsequent measurement of goodwill and eliminates Step 2 from the goodwill impairment test. The standard is effective for annual periods beginning after December 15, 2019 but the Company opted for early adoption for the goodwill impairment test that was completed as of September 30, 2018. The adoption of this standard did not have an impact on the Company's annual goodwill impairment test because the estimated fair value of the reporting unit was greater than its carrying amount.

Recent Accounting Pronouncements Not Yet Adopted

In February 2016, the Financial Accounting Standards Board issued ASU No. 2016-02, Leases, which requires a lessee to record a right-of-use asset and a corresponding lease liability, initially measured at the present value of the lease payments, on the balance sheet for all leases with terms longer than 12 months, as well as the disclosure of key information about leasing arrangements. The standard requires recognition in the statement of operations of a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. This standard also requires classification of all cash payments within operating activities in the statement of cash flows. In July 2018, the Financial Accounting Standards Board issued ASU No. 2018-11, Leases - Targeted Improvements, which provides an additional transition method. The Company will adopt the standard effective January 1, 2019 using a modified retrospective approach and applying the transition method that does not require adjustments to comparative periods nor require modified disclosures in the comparative periods. The Company will elect the package of practical expedients to not reassess whether a contract is or contains a lease, lease classification and initial direct costs for contracts that expired or existed prior to the effective date. As the lessee to material operating leases, the standard will have a material impact on the Company's consolidated balance sheets, but will not have an impact on its consolidated statements of operations. While the adoption remains in progress, the Company expects that the most significant impact will be the recognition of right-of-use assets and lease liabilities for the Company's operating leases. The Company has completed its process to identify the population of lease arrangements and it is nearing the completion of applying the new leasing standard to each arrangement. The Company has also determined the incremental borrowing rate for each arrangement.

In June 2016, the Financial Accounting Standards Board issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, which will replace the incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates on loans, trade and other receivables, held-to-maturity debt securities, and other instruments. The update is effective for annual periods beginning after December 15, 2019 including interim periods within those periods. Early adoption is permitted. The Company is currently assessing the impact of this new standard.

In August 2018, the Financial Accounting Standards Board issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract, which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The update is effective for annual periods beginning after December 15, 2019 including interim periods within those periods and can be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. Early adoption is permitted. The Company does not expect the adoption of this standard to have a material impact on its consolidated financial statements.

Shares Outstanding

Shopify is a publicly traded company listed on the New York Stock Exchange (NYSE: SHOP) and on the Toronto Stock Exchange (TSX: SHOP). As of February 7, 2019 there were 98,352,852 Class A subordinate voting shares issued and outstanding, and 12,283,365 Class B multiple voting shares issued and outstanding.

As of February 7, 2019 there were 2,555,692 options outstanding under the Company’s Fourth Amended and Restated Incentive Stock Option Plan, of which 2,478,520 were vested as of such date. Each such option is or will become exercisable for one Class B multiple voting share. As of February 7, 2019 there were 2,660,426 options outstanding under the Company’s Amended and Restated Stock Option Plan, of which 859,845 were vested as of such date. Each such option is or will become exercisable for one Class A subordinate voting share.

As of February 7, 2019 there were 2,442,335 RSUs and 478 DSUs outstanding under the Company’s Amended and Restated Long Term Incentive Plan. Each such RSU or DSU will vest as one Class A subordinate voting share.

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this Annual Report on Form 40-F for the year ended December 31, 2018 of Shopify Inc. of our report dated February 12, 2019 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in the Exhibit incorporated by reference in this Annual Report on Form 40-F.

We also consent to the incorporation by reference in the Registration Statements on Form F-10 (File No. 333-226444) and Form S-8 (File Nos. 333-204568 and 333-211305) of our report dated February 12, 2019 referred to above. We also consent to the reference to us under the heading “Interests of Experts”, which appears in the Annual Information Form included in the Exhibit incorporated by reference in this Annual Report on Form 40-F, which is incorporated by reference in such Registration Statements.

/s/ PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants
Ottawa, Canada
February 12, 2019

PricewaterhouseCoopers LLP
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EXHIBIT 31.1

CERTIFICATION
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Tobias Lütke, certify that:

1. I have reviewed this annual report on Form 40-F of Shopify Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: **February 12, 2019**

/s/ Tobias Lütke

Tobias Lütke
Chief Executive Officer

CERTIFICATION
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Amy Shapero, certify that:

1. I have reviewed this annual report on Form 40-F of Shopify Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: **February 12, 2019**

/s/ Amy Shapero

Amy Shapero
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Shopify Inc. (the "Company") on Form 40-F for the year ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Tobias Lütke, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: **February 12, 2019**

/s/ Tobias Lütke

Tobias Lütke
Chief Executive Officer

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed "filed" by the Company for purposes of §18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section.

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Shopify Inc. (the "Company") on Form 40-F for the year ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Amy Shapero, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: **February 12, 2019**

/s/ Amy Shapero

Amy Shapero
Chief Financial Officer

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed "filed" by the Company for purposes of §18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section.