BSQUARE

2019

Annual Report

Bsquare Corporation
1415 Western Avenue, Suite 700
Seattle, WA 98104
425.519.5900
www.bsquare.com

BSQUARE

April 28, 2020

Dear Shareholder,

I hope this letter finds you, and those close to you, healthy and safe. We are amidst an unprecedented time and none of us will know the full impact of the COVID-19 pandemic for some time. I am confident though that when we look back on this challenging period, we will say we acted with compassion and dignity.

For Bsquare, 2019 was a rebuilding year. In May, shortly after I arrived, we announced a set of rebuilding initiatives called One Bsquare. With an emphasis on operating excellence, we recast the core operating philosophy of the business. I believe our financial results reflect the impact of those efforts.

In Q3 2019 we reversed a three-quarter trend of decreasing revenue. Total revenue grew quarter over quarter in Q3 2019 and Q4 2019. While 2019 annual revenue was down from 2018, in 2019 we reduced total operating expense by $10.0 million or 34%. The cost cutting included flattening the organization, eliminating executive positions and staff, closing our Taiwan office, and a disciplined focus on fiscal responsibility. Net loss was also lower in 2019 at $9.2 million, or ($0.71) per share as compared to a net loss of $13.7 million, or ($1.08) per share, in 2018. Adjusted EBITDAS was negative $5.6 million for 2019 compared to negative $8.9 million in 2018, a 37% improvement. Note, Adjusted EBITDAS is a non-GAAP measure that is reconciled to the comparable GAAP measure in our Annual Report filed with the SEC on February 24, 2020.

Other One Bsquare initiatives included revising our go-to-market strategy, addressing issues with our product offering, strengthening our partnerships, and re-tooling sales and marketing. I am pleased to report we made significant progress on all fronts. The clearest evidence is on our website, where you can see our B2IQ product and service suite, branding and messaging that we launched in September of 2019.

Turning around a company takes a team and in 2019 we rebuilt senior leadership adding entrepreneurial leaders across the organization. In May of last year Mary Haggard joined as VP of Strategic Partnerships. In September, Chris Wheaton joined as Chief Financial Officer and Steven Gottlieb joined as VP of Marketing. With their help, we are accelerating our business rebuilding efforts.

While work remains, I am pleased that our performance improved three quarters in a row in 2019 and that by year-end we were growing revenue and operating at an expense level that positions us well for the future..

I look forward to 2020, building on a foundation of integrity, entrepreneurship, innovation, and collaboration with our customers and partners, that increases value for you, our shareholder.

Warm regards,

Ralph C Derrickson
President and Chief Executive Officer

110 110th Avenue, N.E. Suite 300
Bellevue, WA 98004
bsquare.com

[This page intentionally left blank]

BSQUARE

BSQUARE CORPORATION
110 110TH AVENUE NE, SUITE 300, BELLEVUE, WASHINGTON 98004

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS
TO BE HELD ON June 11, 2020

TO BSQUARE SHAREHOLDERS:

Notice is hereby given that the 2020 Annual Meeting of Shareholders of BSQUARE Corporation, a Washington corporation (the "Company"), will be held on Tuesday, June 11, 2020 at 10:00 a.m., local time. The meeting will be held at the offices of DLA Piper LLP (US), 701 Fifth Avenue, Suite 6900, Seattle Washington 98104 , for the following purposes:

1. To elect Robert J. Chamberlain and Andrew S. G. Harries as Class I Directors to serve for the ensuing three years and until their successors are duly elected and qualified;
2. To approve the compensation of the Company's named executive officers;
3. To ratify the appointment of Moss Adams LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2020; and
4. To transact such other business as may properly come before the meeting or any adjournment or adjournments thereof.

The foregoing items of business are more fully described in the Proxy Statement accompanying this Notice.

The Board of Directors has fixed the close of business on April 9, 2020 as the record date for the determination of shareholders entitled to vote at this meeting. Only shareholders of record at the close of business on April 9, 2020 are entitled to receive notice of, and to vote at, the meeting and any adjournment thereof.

Given the COVID-19 pandemic, the Company is adding a conference call component to its 2020 Annual Meeting. You are encouraged to dial-in to the conference call at: Toll Free: 1-800-479-1004; Toll/International: 1-856-344-9290; Conference ID: 8715372, which will include the opportunity to ask questions. While the Company plans to conduct the formal business and voting in-person, it will comply and expects shareholders to comply with all applicable stay-at-home or similar orders, including all social distancing protocols. If this requires shifting the 2020 Annual Meeting entirely to a remote format (such as webcast or telephonic meeting), the Company will make appropriate updates. However, the Company is required to hold an annual shareholders' meeting, and the Board of Directors believes that an in-person meeting with a conference call component is the best approach for the Company at this time. To ensure your representation at the meeting, you are urged to mark, sign, date and return the enclosed proxy card as promptly as possible in the postage-prepaid envelope enclosed for that purpose, or to follow the instructions for Internet or telephone voting in the accompanying notice or in the voter instruction form provided by your broker or other nominee. Any shareholder attending the meeting may vote in person even if the shareholder has previously returned a proxy. However, to simplify the voting process and to avoid handling your personal information, we do not plan to implement a voting feature into the conference call.

By Order of the Board of Directors

Christopher Wheaton
Chief Financial Officer, Secretary and Treasurer
Bellevue, Washington
April 28, 2020

Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting to Be Held on June 11, 2020: The proxy statement and annual report to shareholders are available at www.bsquare.com/proxy.

[This page intentionally left blank]

BSQUARE CORPORATION
110 110TH AVENUE NE, SUITE 300, BELLEVUE, WASHINGTON 98004

PROXY STATEMENT
FOR THE 2020 ANNUAL MEETING OF SHAREHOLDERS

PROCEDURAL MATTERS

General

The enclosed proxy is solicited by the Board of Directors, or "Board", of BSQUARE Corporation, a Washington corporation. The Board has made these materials available to you over the internet, or has delivered printed versions of these materials to you by mail, in connection with the Board's solicitation of proxies for use at the 2020 Annual Meeting of Shareholders (the "Annual Meeting") to be held on Tuesday, June 11, 2020 at 10:00 a.m. local time, and at any adjournment or postponement thereof for the purposes set forth in the proxy and in the accompanying Notice of Annual Meeting of Shareholders. The Annual Meeting will be held at the offices of DLA Piper LLP (US), 701 Fifth Avenue, Suite 6900, Seattle Washington 98104, with a conference call component available at: Toll Free: 1-800-479-1004; Toll/International: 1-856-344-9290; Conference ID: 8715372.

As used in this proxy statement, "we," "us," "our" and the "Company" refer to BSQUARE Corporation.

These proxy solicitation materials were first made available on or about May 1, 2020 to all shareholders entitled to vote at the Annual Meeting.

How to Vote my Shares and Participate

To endure your vote is counted, we recommend you vote your shares in advance of the Annual Meeting. Please mark, sign, date and return the enclosed proxy card as promptly as possible in the postage-prepaid envelope enclosed for that purpose, or to follow the instructions for Internet or telephone voting in the accompanying Notice of Internet Availability of Proxy Materials or in the voter instruction form provided by your broker or other nominee. While we plan to conduct the formal business and voting in-person, we will comply and expect our shareholders to comply with all applicable stay-at-home or similar orders, including all social distancing protocols. This may require us to limit the number of in-person attendees. It may also require us to shift the meeting entirely to a remote format (such as webcast or telephonic meeting), and if that occurs, we will make appropriate updates. Accordingly, while in-person is permitted at the Annual Meeting, we urge you to vote your shares in advance.

We are also adding a conference call component to the Annual Meeting. In lieu of attending in-person, we encourage you to dial-in to the conference call at: Toll Free: 1-800-479-1004; Toll/International: 1-856-344-9290; Conference ID: 8715372. The conference call will be functionally similar to our earnings conference calls, including the opportunity to ask questions. However, to simplify the voting process and to avoid handling your personal information, we do not plan to implement a voting feature into the conference call. In turn, this means joining by conference call would not constitute attendance at the meeting for quorum purposes. Unless we change these plans, your only way to officially attend and to vote at the Annual Meeting will be to attend in-person and vote, or to vote through a proxy attending the meeting that you have instructed in advance (see "—Vote Without Attending the Annual Meeting").

Voting Without Attending the Annual Meeting

To vote your shares without attending the meeting, please follow the instructions for Internet or telephone voting on the Notice of Internet Availability of Proxy Materials. If you request printed copies of the proxy materials by mail, you may also vote by signing and submitting your proxy card and returning it by mail, if you are the stockholder of record, or by signing the voter instruction form provided by your broker or other nominee and returning it by mail, if you are the beneficial owner but not the stockholder of record. We encourage all shareholders to vote in this manner in light of the uncertainties associated with COVID-19.

Record Date and Outstanding Shares

Only shareholders of record at the close of business on April 9, 2020 (the "record date") are entitled to receive notice of and to vote at the Annual Meeting. Our only outstanding voting securities are shares of common stock, no par value. As of the record date, 13,098,718 shares of our common stock were issued and outstanding, held by 112 shareholders of record.

Revocability of Proxies

Any proxy may be revoked by the person giving it at any time prior to its use. To do so, the shareholder must either: (i) deliver a written instrument revoking the proxy to our Corporate Secretary, at the address referenced above or (ii) deliver a duly executed proxy bearing a later date (in either case no later than the close of business on June 10, 2020); or (iii) attend the Annual Meeting and vote in person.

Voting and Solicitation

Each holder of common stock is entitled to one vote for each share held.

This solicitation of proxies is made by our Board of Directors, and all related costs will be borne by us. We may reimburse brokerage firms and other persons representing beneficial owners of shares for their expenses in forwarding solicitation material to such beneficial owners. Proxies may also be solicited by certain of our directors, officers or administrative employees without the payment of any additional consideration. Solicitation of proxies may be made by mail, by telephone, by email, in person or otherwise.

Shareholders of Record and "Street Name" Holders

Where shares are registered directly in the holder's name, that holder is the shareholder of record with respect to those shares. If shares are held by an intermediary, such as a broker or other nominee, then the broker or other nominee is considered the shareholder of record as to those shares. Those shares are said to be held in "street name" on behalf of the beneficial owner of the shares. Street name holders generally cannot directly vote their shares and must instead instruct the broker or other nominee on how to vote their shares using the voting instruction form provided by that broker or other nominee. Many brokers or other nominees also offer the option of giving voting instructions over the internet or by telephone. Instructions for giving your vote as a street-name holder are provided on your voting instruction form, and you should contact your broker or other nominee with any questions about its form or how to vote.

Quorum; Broker Non-Votes and Abstentions

At the Annual Meeting, an inspector of elections will determine the presence of a quorum and tabulate the results of the voting by shareholders. A quorum exists when holders of a majority of the total number of outstanding shares of common stock that are entitled to vote at the Annual Meeting are present at the Annual Meeting in person or by proxy. A quorum is necessary for the transaction of business at the Annual Meeting.

Broker non-votes can occur as to shares held in street name. This is the case when a broker or other nominee submits a proxy for the Annual Meeting but does not vote on a particular proposal because that broker or other nominee does not have discretionary voting power with respect to that proposal and has not received instructions from the beneficial owner. Under the current rules that govern brokers and other nominee holders of record, if you do not give instructions to your broker or other nominee, it will be able to vote your shares only with respect to proposals for which they have discretionary voting authority.

The election of directors (Proposal No. 1) and approval of compensation of executive officers (Proposal No. 2) are proposals for which brokers and other nominees do not have discretionary voting authority. If you do not instruct your broker or other nominees how to vote on these proposals, your broker or other nominees will not vote on them and those non-votes will be counted as broker non-votes. The ratification of the appointment of Moss Adams LLP as our independent registered public accounting firm (Proposal No. 3) is considered discretionary and your brokerage firm will be able to vote on this proposal even if it does not receive instructions from you, as long as it holds your shares in its name.

Abstentions and broker non-votes are treated as shares present for determining whether there is a quorum for the transaction of business at the Annual Meeting. Abstentions and broker non-votes are not counted for determining the number of votes cast, and therefore will not affect the outcome of the vote on any of the proposals in this proxy statement.

Required Votes and Voting

Assuming that a quorum is present at the Annual Meeting, the following votes will be required:

- With regard to Proposal No. 1, the two nominees for election to the Board of Directors who receive the greatest number of votes cast "for" the election of the directors by the shares present, in person or by proxy, will be elected to the Board of Directors. Shareholders are not entitled to cumulate votes in the election of directors.
- With regard to Proposals Nos. 2 and 3, approval of each of the proposals requires that the votes cast in favor of the proposal exceed the votes cast against it.

All shares entitled to vote and represented by properly executed, unrevoked proxies received before the Annual Meeting will be voted at the Annual Meeting in accordance with the instructions given on those proxies. If no instructions are given on a properly executed proxy, the shares represented by that proxy will be voted as follows:

FOR the director nominees named in Proposal No. 1 of this proxy statement;

FOR Proposal No. 2, to approve the compensation of our named executive officers as disclosed in this proxy statement; and

FOR Proposal No. 3, to ratify the appointment of Moss Adams LLP as our independent registered public accounting firm.

If any other matters are properly presented for consideration at the Annual Meeting, which may include, for example, a motion to adjourn the Annual Meeting to another time or place (including, without limitation, for the purpose of soliciting additional proxies), the persons named in the enclosed proxy and acting thereunder will have discretion to vote on those matters as they deem advisable. We do not currently anticipate that any other matters will be raised at the Annual Meeting.

Deadlines for Receipt of Shareholder Proposals

Shareholder proposals may be included in our proxy statement and form of proxy for an annual meeting so long as they are provided to us on a timely basis and satisfy the other conditions set forth in Rule 14a-8 under the Securities Exchange Act of 1934, as amended, regarding the inclusion of shareholder proposals in company-sponsored proxy materials. We currently anticipate holding our 2021 annual meeting of shareholders in June 2021, although the Board may decide to schedule the meeting for a different date. For a shareholder proposal to be considered pursuant to Rule 14a-8 for inclusion in our proxy statement and form of proxy for the annual meeting to be held in 2021, we must receive the proposal at our principal executive offices, addressed to our Secretary, no later than December 31, 2021. Submitting a shareholder proposal does not guarantee that it will be included in our proxy statement and form of proxy.

In addition, a shareholder proposal that is not intended for inclusion in our proxy statement and form of proxy under Rule 14a-8 (including director nominations) shall be considered "timely" within the provisions of our Bylaws and may be brought before the 2020 annual meeting of shareholders provided that we receive information and notice of the proposal in compliance with the requirements set forth in our Bylaws, addressed to our Secretary at our principal executive offices, no later than March 13, 2021. A copy of the full text of our Bylaws may be obtained by writing to our Secretary at our principal executive offices.

We strongly encourage any shareholder interested in submitting a proposal to contact our Secretary in advance of these deadlines to discuss any proposal he or she is considering, and shareholders may want to consult knowledgeable counsel with regard to the detailed requirements of applicable securities laws. All notices of shareholder proposals, whether or not intended to be included in our proxy materials, should be in writing and sent to our principal executive offices, located at: BSQUARE Corporation, 110 110th Avenue NE, Suite 300, Bellevue, Washington 98004, Attention: Secretary.

PROPOSAL NO. 1

ELECTION OF DIRECTORS

General

Our Articles of Incorporation provide that the Board of Directors has seven seats. The Board of Directors is currently divided into three classes, with each class having a three-year term. A director serves in office until his or her respective successor is duly elected and qualified, unless the director is removed, resigns or, by reason of death or other cause, is unable to serve in the capacity of director. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of an equal number of directors. Set forth below is certain information furnished to us by the director nominees and by each of the incumbent directors whose terms will continue following the Annual Meeting. There are no family relationships among any of our directors or officers.

Nominees for Director

Two Class I directors are to be elected at the Annual Meeting for three-year terms ending in 2023. The Governance and Nominating Committee of the Board of Directors has nominated Robert J. Chamberlain and Andrew S. G. Harries for election as Class I directors. Mr. Chamberlain has been a director since 2015 and Mr. Harries has been a director since 2012. Unless otherwise instructed, the proxy holders will vote the proxies received by them for the election of Robert J. Chamberlain and Andrew S. G. Harries to the Board of Directors. Each of the nominees has indicated that he or she will serve if elected. We do not anticipate that any of the nominees will be unable or unwilling to stand for election, but if that occurs, all proxies received may be voted by the proxy holders for another person nominated by the Governance and Nominating Committee. As there are two nominees, proxies may be voted for up to two persons.

Vote Required for Election of Directors

If a quorum is present, the nominees for election to the Board of Directors receiving the greatest number of votes cast “for” the election of the directors by the shares present, in person or by proxy, will be elected to the Board of Directors.

Nominees and Continuing Directors

The names and certain information as of the record date about the nominees and each director continuing in office after the Annual Meeting are set forth below.

Name of Director Nominees	Age	Position	Director Since	Term Expires
Robert J. Chamberlain	66	Director	2015	2020 (Class I)
Andrew S.G. Harries	58	Chairman of the Board	2012	2020 (Class I)

Name of Continuing Directors	Age	Position	Director Since	Term Expires
Ralph C. Derrickson	61	Director, President and Chief Executive Officer	2019	2021 (Class II)
Ryan Vardeman	42	Director	2018	2021 (Class II)
Davin W. Cushman	46	Director	2018	2022 (Class III)
Mary Jesse	55	Director	2016	2022 (Class III)
Robert J. Peters	42	Director	2018	2022 (Class III)

Director Nominees

Robert J. Chamberlain has been a director since August 2015. Since April 2018, Mr. Chamberlain has been the Chief Financial Officer of ZipWhip, a two-way business texting software company. From August 2014 to April 2016, Mr. Chamberlain served as the Chief Financial Officer of Big Fish Games Incorporated, a leading provider of casual games, which was acquired by Churchill Downs, Inc. in December 2014. From February 2013 to August 2014, Mr. Chamberlain served as the Senior Vice President and Chief Financial Officer of Audience Science Incorporated, a leading provider of enterprise advertising management systems. Prior to that, Mr. Chamberlain was the Chief Financial Officer of other technology companies in the Seattle area including PopCap Games Incorporated (acquired by Electronic Arts, Inc.), WatchGuard Technologies Incorporated, F5 Networks, Onyx Software Corp. (acquired by Consona Corporation) and Photodisc (acquired by Getty Images, Inc.). Earlier in his career, Mr. Chamberlain was an audit partner in the Seattle office of KPMG where he served middle market public and private companies. Mr. Chamberlain has a B.S. in Business Administration-Accounting from California State University Northridge. Board of Directors has concluded that Mr. Chamberlain should serve as a director because he brings to our Board of Directors substantial financial expertise that includes extensive knowledge of the complex financial and operational issues facing publicly traded companies, and a deep understanding of accounting principles and financial reporting rules and regulations. He also brings professional service expertise, technology industry experience, and sales and marketing experience at KPMG.

Andrew S. G. Harries has been a director since November 2012, has served as the Chairman of the Board since July 2013 and served as the Executive Chairman from May 2018 to March 2019. Mr. Harries is a business advisor and corporate director and since 2016 has held the post of Tom Foord Professor of Practice in Entrepreneurship and Innovation at Simon Fraser University's Beedie School of Business. He is an advisor to Mojio, Inc., an open platform for connected cars, and serves on the advisory council and is a past board chair of Science World British Columbia. Mr. Harries chaired the board of directors of Contractually, an online contract management company, from January 2014 until its acquisition by Coupa Software in December 2015, and co-founded Zeugma Systems Inc. where he served as the President and Chief Executive Officer from 2004 until Tellabs Inc. acquired substantially all of Zeugma in 2010. Mr. Harries was a co-founder of Sierra Wireless (NASDAQ: SWIR), a NASDAQ-listed wireless Internet of Things systems vendor, from 1993 to 2004, and previously served as Sierra's Senior Vice President of Sales, Marketing and Operations. Prior to co-founding Sierra Wireless, Mr. Harries held a variety of positions at Motorola Inc. He holds three US patents and an M.B.A. from Simon Fraser University. The Board of Directors has concluded that Mr. Harries should serve as a director because of his embedded technology industry expertise and extensive management and sales and marketing experience. He also has experience as a public company board member.

Continuing Directors

Davin W. Cushman has been a director since November 2018. Since 2010, Mr. Cushman has been the Chief Executive Officer of Ignite Technologies, Inc. and its affiliates, a group of enterprise software and services companies operating under the private ownership of ESW Capital. Also, since 2010, Mr. Cushman has been the President and sole owner of Cushman Management Company, a boutique strategy consulting firm advising enterprise software companies. Prior to 2010, Mr. Cushman held operations analyst roles with Capital One Financial Corporation as well as leadership positions with enterprise software company Trilogy and its spin-off, pcOrder.com. Mr. Cushman holds a B.A. in Politics from Princeton University and an M.B.A. from the Kellogg School of Management at Northwestern University. The Board of Directors has concluded that Mr. Cushman should serve as a director because of his significant experience in various roles in the enterprise software industry, including as chief executive officer of companies that provide software and technical consulting services to the types of organizations we serve and strive to serve.

Ralph C. Derrickson has been a director and our President and Chief Executive Officer since March 2019. Prior to that, since July 2018, Mr. Derrickson served as the Managing Director of RCollins Group, a strategic consulting company, and from October 2017 until July 2018, he served as the Senior Vice President of Corporate Development for Avizia, Inc., a telemedicine hardware, software and physician services company, until its acquisition by American Well in July 2018. From January 2006 until October 2017, Mr. Derrickson served as the President and Chief Executive Officer of Carena, Inc., a virtual care software and physician services company, until its acquisition by Avzia in October 2017. Prior to that, Mr. Derrickson was managing director of venture investments at Vulcan Inc., an investment management firm, was a founding partner of Watershed Capital, an early-stage venture capital firm, and held senior leadership positions at Metricom, Starwave Corporation (acquired by Walt Disney), NeXT Computer (acquired by Apple Computer) and Sun Microsystems. Since 2004, Mr. Derrickson has been a board member of Perficient, Inc. (NASDAQ: PRFT), a publicly traded digital transformation consulting company. Mr. Derrickson holds a B.T. in Systems Software Science from the Rochester Institute of Technology. The Board of Directors has concluded that Mr. Derrickson should serve as a director because of his experience as a chief executive officer, and in various other executive roles, which has provided him with broad leadership and executive experience, including operational, strategic planning, corporate development and mergers and acquisitions experience. As our President and Chief Executive Officer, Mr. Derrickson has first-hand knowledge of our business and provides valuable insight with respect to our operations and strategic opportunities.

Mary Jesse has been a director since August 2016. Ms. Jesse is a technology executive, strategist, inventor and pioneer in the wireless industry. In September 2019, Ms. Jesse joined Alvarez & Marsal as a Senior Director where she is currently assigned as Chief Operating Officer of Mobile Technologies, Inc. From January 2018 to August 2018, Ms. Jesse served as Chief Executive Officer and board member of Heyou Media, a technology-driven content company. From September 2015 to October 2017, she served as Chief Strategy Officer of VRstudios, a global virtual reality company based in Bellevue, Washington. From 2007 to October 2014, she was the founder and Chief Executive Officer of Ivy Corp., an enterprise messaging technology company. Prior to that, she served as the co-founder and Chief Technology Officer of RadioFrame Networks; Vice President of Strategic Technology of McCaw Cellular Communications, Inc.; and Vice President of Technology Development of AT&T Wireless. A licensed professional engineer, Ms. Jesse holds a B.S. in electrical engineering from the University of Utah and an M.S. in electrical engineering from Santa Clara University, in addition to having authored nineteen patents. She currently serves on the Washington Governors University business council in addition to serving as an advisor to multiple technology companies. Ms. Jesse volunteers her time to support STEM education, entrepreneurship and diversity in business and technology. The Board of Directors has concluded that Ms. Jesse should serve as a director because of her extensive technology product development experience and work with a wide range of emerging businesses.

Robert J. Peters has been a director since August 2018 and served as an observer to the Board from June to August 2018. Mr. Peters is a principal and co-founder of Palogic Value Management, L.P., the investment manager of Palogic Value Fund, LP, a Dallas, Texas based investment management company, a position he has held since January 2007. Mr. Peters routinely analyzes public companies' business plans, financial statements, and competitive positioning. Prior to founding Palogic, Mr. Peters was an investment banker with Stephens Inc., based in Little Rock, Arkansas, where he served as an analyst and associate responsible for execution of a variety of corporate finance transactions including sell side mergers and acquisitions, buy side mergers and acquisitions, leveraged buyouts, private equity investments, initial public offerings, and private placements of debt and equity. Mr. Peters attended Texas Tech University and received an M.S. in Accounting and a B.A. in Business Administration – Accounting. The Board of Directors has concluded that Mr. Peters should serve as a director because of his significant experience in equity capital markets, assessing corporate strategy, and capital allocation and given his affiliation with one of our largest shareholders.

Ryan L. Vardeman has been a director since June 2018. Mr. Vardeman is a principal and co-founder of Palogic Value Management, L.P., a Dallas, Texas based investment management company, a position he has held since January 2007. Mr. Vardeman has extensive corporate strategy, operating, financial and investment experience including capital structure analysis, a focus on small-cap equities, and investing in a broad range of industries with an emphasis on technology and software companies. Mr. Vardeman holds a B.S. in Electrical Engineering and Computer Science from Texas Tech University and an M.B.A. from the Owen Graduate School of Management at Vanderbilt University. The Board of Directors has concluded that Mr. Vardeman should serve as a director because of his extensive financial and operational experience and given his affiliation with one of our largest shareholders.

THE BOARD OF DIRECTORS RECOMMENDS THAT SHAREHOLDERS VOTE FOR THE ELECTION OF EACH OF MESSRS. CHAMBERLAIN AND HARRIES TO THE BOARD OF DIRECTORS.

CORPORATE GOVERNANCE

Board of Directors Leadership Structure

The Board of Directors has adopted a structure under which the Chairman of the Board is an independent director. We believe that having a Chairman independent of management provides effective leadership for the Board of Directors and helps ensure critical and independent thinking with respect to our strategy and performance. In addition, the Board believes this governance structure promotes balance between the Board's independent authority to oversee our business and the Chief Executive Officer and his management team who manage the business on a day-to-day basis. Moreover, the current separation of the Chairman and Chief Executive Officer roles allows the Chief Executive Officer to focus his time and energy on operating and managing the business while leveraging the experience and perspectives of the Chairman. Our Chief Executive Officer has historically served as a member of and as the sole management representative on the Board of Directors. Mr. Derrickson is a director as well as our President and Chief Executive Officer. We believe it is important to enable our Chief Executive Officer to provide information and insight about us directly to the directors in their deliberations. Further, our Board of Directors believes that separating the Chief Executive Officer and Chairman of the Board roles as well as having the Chairman of the Board role represented by an independent director is the appropriate leadership structure for us at this time and demonstrates our commitment to effective corporate governance.

Our Chairman of the Board is responsible for the effective functioning of our Board of Directors, enhancing its efficacy by guiding its processes and presiding at Board of Directors meetings and executive sessions of the independent directors. Our Chairman presides at shareholder meetings and ensures that directors receive appropriate information from our management to fulfill their responsibilities. Our Chairman also acts as a liaison between our Board of Directors and executive management, promoting clear and open communication between management and the Board of Directors.

Board of Directors Role in Risk Oversight

Our Board of Directors has responsibility for the oversight of risk management. Our Board, either as a whole or through its committees, regularly discusses with management our major risk exposures, their potential impact on us and the steps we take to manage them. While our Board is ultimately responsible for risk oversight, our Board committees assist the Board of Directors in fulfilling its oversight responsibilities in certain areas of risk. In particular, our Audit Committee focuses on financial, accounting and investment risks and oversees and approves company-wide risk management practices. Our Governance and Nominating Committee focuses on the management of risks associated with Board organization, membership, structure and corporate governance. In addition, our Compensation Committee assists the Board of Directors in fulfilling its oversight responsibilities with respect to the management of risks arising from our compensation policies and programs and related to succession planning for our executive officers.

Board of Directors Independence

The Board of Directors has determined, after consideration of all relevant factors, that each of Messrs. Chamberlain, Cushman, Harries, Peters and Vardeman and Ms. Jesse, together constituting a majority of our Board of Directors, qualifies as an “independent” director as defined under applicable rules of The NASDAQ Stock Market LLC (“NASDAQ”) and that none of such directors has any relationship with us that would interfere with the exercise of their independent business judgment.

Standing Committees and Attendance

The Board of Directors held 10 meetings during 2019. All directors attended more than 75% of the aggregate of the meetings of the Board of Directors and committees thereof, if any, upon which such director served during the period for which he or she was a director or committee member during 2019.

The Board has an Audit Committee, a Compensation Committee and a Governance and Nominating Committee. Information about these standing committees and committee meetings is set forth below.

Audit Committee

The Audit Committee is currently comprised of Messrs. Chamberlain (Committee Chair) and Harries and Ms. Jesse. The Board of Directors has determined that, after consideration of all relevant factors, each of these directors qualifies as an “independent” director under applicable SEC and NASDAQ rules. Each member of the Audit Committee is able to read and understand fundamental financial statements, including our consolidated balance sheets, consolidated statements of operations and consolidated statements of cash flows. No member of the Audit Committee has participated in the preparation of our consolidated financial statements, or those of any of our current subsidiaries, at any time during the past three years. The Board of Directors has designated Mr. Chamberlain as an “audit committee financial expert” as defined under applicable SEC rules and has determined that Mr. Chamberlain possesses the requisite “financial sophistication” under applicable NASDAQ rules.

The Audit Committee operates under a written charter setting forth the functions and responsibilities of the committee, which is reviewed by the committee on an annual basis, and by the Board of Directors as appropriate. A current copy of the Audit Committee charter is available on our website at www.bsquare.com on the Corporate Governance page under Management and Corporate Governance - Board Committees and Charter Documents.

The Audit Committee is responsible for overseeing our independent auditors, including their selection, retention and compensation, reviewing and approving the scope of audit and other services by our independent auditors, reviewing the accounting policies, judgments and assumptions used in the preparation of our financial statements and reviewing the results of our audits. The Audit Committee is also responsible for reviewing the adequacy and effectiveness of our internal controls and procedures, including risk management, establishing procedures regarding complaints concerning accounting or auditing matters, reviewing and, if appropriate, approving related-party transactions, reviewing compliance with our Code of Business Conduct and Ethics, and reviewing our investment policy and compliance therewith. The Audit Committee held four meetings during 2019.

Compensation Committee

The Compensation Committee currently consists of Messrs. Cushman (Committee Chair), Harries and Vardeman. The Board of Directors has determined that, after consideration of all relevant factors, each of these directors qualifies as an “independent” and “non-employee” director under applicable NASDAQ and SEC rules. The Compensation Committee makes recommendations to the Board of Directors regarding our general compensation policies as well as the compensation plans and specific compensation levels for its executive officers. The Compensation Committee held six meetings during 2019.

The Compensation Committee has a number of functions and responsibilities as delineated in its written charter, which is reviewed by the committee on an annual basis, and by the Board of Directors as appropriate. A current copy of the Compensation Committee charter is available on our website at www.bsquare.com on the Corporate Governance page under Management and Corporate Governance - Board Committees and Charter Documents.

One of the primary responsibilities of the Compensation Committee is to oversee, and make recommendations to the Board of Directors for its approval of, the compensation programs and performance of our executive officers, which includes the following activities:

- Establishing the objectives and philosophy of the executive compensation programs;
- Designing and implementing the compensation programs;
- Evaluating the performance of executives relative to their attainment of goals under the programs and reporting its evaluation to the Board of Directors;
- Developing and maintaining a succession plan for the Chief Executive Officer;
- Calculating and establishing payouts and awards under the programs as well as discretionary payouts and awards;
- Reviewing base salary levels and equity ownership of the executives; and
- Engaging consultants from time to time, as appropriate, to assist with program design and related matters.

Additional information regarding the roles, responsibilities, scope and authority of the Compensation Committee, as well as the extent to which the Committee may delegate its authority, the role that our executive officers serve in recommending compensation and the role of compensation consultants in our compensation process is set forth below under “Executive Officer Compensation.”

The Compensation Committee also periodically reviews the compensation of the Board of Directors and proposes modifications, as necessary, to the full Board for its consideration.

Governance and Nominating Committee

The Governance and Nominating Committee currently consists of Ms. Jesse (Committee Chair), Mr. Cushman and Mr. Peters. The Board of Directors has determined that, after consideration of all relevant factors, each of these directors qualifies as an “independent” director under applicable NASDAQ rules. The Governance and Nominating Committee held three meetings during 2019.

The Governance and Nominating Committee operates under a written charter setting forth the functions and responsibilities of the committee, which is reviewed by the committee on an annual basis, and by the Board of Directors as appropriate. A current copy of the Governance and Nominating Committee charter is available on our website at www.bsquare.com on the Corporate Governance page under Management and Corporate Governance - Board Committees and Charter Documents.

The primary responsibilities of the Governance and Nominating Committee are to:

- Develop and recommend to the Board of Directors criteria for selecting qualified director candidates;
- Identify individuals qualified to become Board members;
- Evaluate and select director nominees for each election of directors;
- Consider the committee structure of the Board of Directors and the qualifications, appointment and removal of committee members;
- Recommend codes of conduct and codes of ethics applicable to us;
- Evaluate the composition and performance of the Board of Directors;
- Ensure directors are keeping abreast of current governance standards; and
- Provide oversight in the evaluation of the Board of Directors and each committee.

Director Nomination Process

The Board of Directors has determined that director nomination responsibilities should be overseen by the Governance and Nominating Committee (the “GNC”). One of the GNC’s goals is to assemble a Board that brings to us a variety of perspectives and skills derived from high quality business and professional experience. Although the GNC and the Board of Directors do not have a formal diversity policy, the Board of Directors instructed the GNC to consider such factors as it deems appropriate to develop a Board and committees that are diverse in nature and comprised of experienced and seasoned advisors. Factors considered by the GNC include judgment, knowledge, skill, diversity (including factors such as race, gender and experience), integrity, experience with businesses and other organizations of comparable size, including experience in software products and services, the Internet of Things industry, business, finance, administration or public service, the relevance of a candidate’s experience to our needs and experience of other Board members, familiarity with national and international business matters, experience with accounting rules and practices, the desire to balance the considerable benefit of continuity with the periodic injection of the fresh perspective provided by new members, and the extent to which a candidate would be a desirable addition to the Board of Directors and any committees of the Board of Directors. In addition, directors are expected to be able to exercise their best business judgment when acting on behalf of us and our shareholders, act ethically at all times and adhere to the applicable provisions of our Code of Business Conduct and Ethics. Other than consideration of the foregoing and applicable SEC and NASDAQ requirements, unless determined otherwise by the GNC, there are no stated minimum criteria, qualities or skills for director nominees. The GNC may also consider such other factors as it may deem are in the best interests of us and our shareholders. In addition, at least one member of the Board of Directors serving on the Audit Committee should meet the criteria for an “audit committee financial expert” having the requisite “financial sophistication” under applicable NASDAQ and SEC rules, and a majority of the members of the Board of Directors should meet the definition of “independent director” under applicable NASDAQ rules.

The GNC identifies director nominees by first evaluating the current members of the Board of Directors willing to continue in service. Current members of the Board of Directors with skills and experience that are relevant to our business and who are willing to continue in service are considered for re-nomination, balancing the value of continuity of service by existing members of the Board of Directors with that of obtaining a new perspective. The GNC also takes into account an incumbent director's performance as a Board member. If any member of the Board of Directors does not wish to continue in service, if the GNC decides not to re-nominate a member for reelection, if the Board decided to fill a director position that is currently vacant or if the Board of Directors decides to recommend that the size of the Board of Directors be increased, the GNC identifies the desired skills and experience of a new nominee in light of the criteria described above. Current members of the Board of Directors and management are polled for suggestions as to individuals meeting the GNC's criteria. Research may also be performed to identify qualified individuals. Nominees for director are selected by a majority of the members of the GNC, with any current directors who may be nominees themselves abstaining from any vote relating to their own nomination.

It is the policy of the GNC to consider suggestions for persons to be nominated for director that are submitted by shareholders. The GNC will evaluate shareholder suggestions for director nominees in the same manner as it evaluates suggestions for director nominees made by management, then-current directors or other appropriate sources. Shareholders suggesting persons as director nominees should send information about a proposed nominee to our Secretary at our principal executive offices as referenced above at least 120 days before the anniversary of the mailing date of the prior year's proxy statement. This information should be in writing and should include a signed statement by the proposed nominee that he or she is willing to serve as a director of BSQUARE, a description of the proposed nominee's relationship to the shareholder and any information that the shareholder feels will fully inform the GNC about the proposed nominee and his or her qualifications. The GNC may request further information from the proposed nominee and the shareholder making the recommendation. In addition, a shareholder may nominate one or more persons for election as a director at our annual meeting of shareholders if the shareholder complies with the notice, information, consent and other provisions relating to shareholder nominees contained in our Bylaws. Please see the section above titled "Deadlines for Receipt of Shareholder Proposals" for important information regarding shareholder proposals, including director nominations.

Code of Ethics

We have adopted a Code of Business Conduct and Ethics in compliance with applicable rules of the SEC that applies to our principal executive officer, our principal financial officer and our principal accounting officer or controller, or persons performing similar functions, as well as to all members of our Board of Directors and all other employees. A copy of the Code of Business Conduct and Ethics is available on our website at www.bsquare.com on the Corporate Governance page under Management and Corporate Governance – Policies. We will disclose, on our website, any amendment to, or waiver from, our Code of Business Conduct and Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and that relates to any element of the Code of Business Conduct and Ethics enumerated in applicable rules of the SEC.

2019 Director Compensation

When joining the Board, directors receive a one-time grant of 25,000 stock options, which vest quarterly over two years, and an initial grant of restricted stock units. The Chairman of the Board receives a one-time grant of 50,000 stock options when joining the Board (or 25,000 stock options if appointed as Chairman of the Board while already serving as a director), and an initial grant of restricted stock units. The number of shares underlying the initial restricted stock unit awards granted to new directors is determined by dividing $50,000 by our closing stock price on the date of grant (or $75,000 in the case of the Chairman of the Board (or $25,000 if appointed as Chairman of the Board while already serving as a director)) and is prorated based on the date on which such director is appointed. Thereafter, standing directors receive annual grants of restricted stock units, the number of shares underlying which is determined by dividing $50,000 by our closing stock price on the date of grant ($75,000 in the case of the Chairman of the Board). The annual restricted stock unit awards are granted on the earlier of (i) the day of the annual meeting of our shareholders or (ii) the last trading day of our second fiscal quarter. The restricted stock unit awards vest quarterly over one year. All equity awards cease vesting as of the date a director's service on the Board terminates for any reason, provided that the Board may accelerate the vesting of any outstanding stock award for a director whose service on the Board terminates for any reason other than removal for cause.

We also pay annual cash director fees of $30,000 to non-Chair directors and $40,000 to the Chairman of the Board, and annual Board Committee fees to directors who serve on the Audit Committee of $10,000 and $5,000 to directors who serve on other committees. The Chairs of the Governance and Nominating Committee and the Compensation Committee receive additional annual Board Committee fee compensation of $3,000. The Board of Directors may also determine to pay these cash amounts in restricted stock units. All cash amounts are payable in quarterly increments. Directors are also reimbursed for reasonable expenses incurred for Board-related activities. Notwithstanding the foregoing, directors who are also our employees, including Mr. Derrickson, our President and Chief Executive Officer, do not receive additional compensation for services provided as a director.

The table below presents the 2019 compensation of our non-employee directors. The compensation of Ralph C. Derrickson, a director and former President and Chief Executive Officer, is described in the Summary Compensation Table in the section titled "Executive Officer Compensation."

Name	Fees Earned or Paid in Cash(1) ($)	Stock Awards(2) ($)	Option Awards(3) ($)	Total ($)
Robert J. Chamberlain (4)	$ 40,000	$ 50,000	$ -	$ 90,000
Davin W. Cushman (5)	41,889	50,000	-	91,889
Andrew S.G. Harries (6)	55,000	75,000	-	130,000
Mary Jesse (7)	46,611	50,000	-	96,611
Robert J. Peters (8)	35,000	50,000	-	85,000
Ryan L. Vardeman (9)	35,000	50,000	-	85,000

(1) Fees paid earned or paid in cash are composed of payments for services performed in each prior quarter.

(2) The amounts in this column reflect the aggregate grant-date fair value of restricted stock unit awards, determined in accordance with the Financial Accounting Standards Board Accounting Standards Codification Topic 718 for stock-based compensation ("Topic 718") without regard to forfeitures. The amounts included reflect only the awards treated as granted in 2019. Assumptions used in the calculation of these award amounts are set forth in Note 10 (Shareholders' Equity) to the financial statements included in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 24, 2020 (the "2019 10-K").

(3) The amounts in this column reflect the aggregate grant-date fair value of stock option awards, determined in accordance with Topic 718 without regard to forfeitures. The amounts included reflect only the awards treated as granted in 2019. Assumptions used in the calculation of these award amounts are set forth in Note 10 (Shareholders' Equity) to the financial statements included in Part II, Item 8 of our 2019 10-K.

(4) Mr. Chamberlain held 25,000 unvested stock options and 17,361 unreleased restricted stock units as of December 31, 2019.

(5) Mr. Cushman was appointed to our Board in November 2018 and held 25,000 unvested stock options and 17,361 unreleased restricted stock units as of December 31, 2019.

(6) Mr. Harries held 25,000 unvested stock options and 26,041 unreleased restricted stock units as of December 31, 2019.

(7) Ms. Jesse held 25,000 unvested stock options and 17,361 unreleased restricted stock units as of December 31, 2019.

(8) Mr. Peters was appointed to our Board in August 2018 and held 25,000 unvested stock options and 17,361 unreleased restricted stock units as of December 31, 2019.

(9) Mr. Vardeman was appointed to our Board in June 2018 and held 25,000 unvested stock options and 17,361 unreleased restricted stock units as of December 31, 2019.

EXECUTIVE OFFICER COMPENSATION

Executive Officers

The names and certain information about our executive officers as of the record date are set forth below:

Name	Age	Position
Ralph C. Derrickson	61	President and Chief Executive Officer
Christopher Wheaton	48	Chief Financial Officer, Secretary and Treasurer

Mr. Derrickson's biographical details are set out above under the heading titled "Nominees and Continuing Directors."

Christopher Wheaton joined us as Chief Financial Officer in September 2019. Prior to joining BSQUARE, in November 2018, Mr. Wheaton was employed at IslandWood, a non-profit environmental education organization and served as its interim Chief Financial and Operating Officer from January 2019 to September 2019. From April 2015 to September 2018, Mr. Wheaton served as the Chief Operating and Financial Officer for Pacific Science Center Foundation, a non-profit educational organization. From July 2003 until April 2015, Mr. Wheaton co-founded and served as the Chief Operating and Financial Officer for EnerG2 Technologies, Inc., an advanced carbon materials manufacturing company. Prior to 2003, Mr. Wheaton was employed by several public and private companies in senior financial management positions. Mr. Wheaton received a B.A. from Northwestern University and an MBA from the Stanford Graduate School of Business.

Summary Compensation Table

The following table sets forth the compensation earned during the past two fiscal years by (i) the persons who served as our chief executive officer during 2019 and (ii) the two most highly compensated executive officers other than the chief executive officer who were serving as executive officers during 2019 and whose total compensation for 2019 exceeded $100,000. The persons described in clauses (i) and (ii) above are collectively referred to herein as our "named executive officers."

Summary Compensation Table

Name and principal position	Year	Salary ($)	Bonus (1) ($)	Stock awards(2) ($)	Option awards(3) ($)	All other compen-sation(4) ($)	Total ($)
Ralph C. Derrickson	2019	256,250	—	—	1,108,125	8,420	1,372,795
President and Chief Executive Officer	2018	—	—	—	—	—	—
Christopher Wheaton	2019	72,981	—	—	164,050	1,982	239,012
Chief Financial Officer, Secretary and Treasurer	2018	—	—	—	—	—	—
Kevin T. Walsh (5)	2019	311,793	15,000	26,750	—	4,580	358,123
Former Acting Chief Executive Officer	2018	272,673	—	30,000	—	9,601	312,274
Peter J. Biere (6)	2019	289,454	20,000	28,429	—	10,652	348,535
Former Chief Financial Officer, Secretary and Treasurer	2018	277,944	—	45,000	—	11,428	334,372
Giles Frith (7)	2019	232,507	60,000	—	—	12,954	305,461
Former Chief Operating Officer	2018	251,868	—	—	—	10,710	262,578

(1) Represents cash bonuses earned by Messrs. Walsh, Biere and Frith under the 2018 Retention Incentive Bonus Program, earned and paid 2019.to Mr. Walsh in April 2019, to Mr. Frith in May 2019, and to Mr. Biere in July 2019.

(2) The amounts in this column reflect the aggregate grant-date fair value of restricted stock unit awards, determined in accordance with Topic 718 without regard to forfeitures. The amounts included for a particular year reflect only the awards treated as granted in that year. Assumptions used in the calculation of these award amounts are set forth in Note 11 (Shareholders' Equity) to the financial statements included in Part II, Item 8 of our 2019 10-K.

(3) The amounts in this column reflect the aggregate grant-date fair value of stock option awards, determined in accordance with Topic 718 without regard to forfeitures. The amounts included for a particular year reflect only the awards treated as granted in that year. Assumptions used in the calculation of these award amounts are set forth in Note 11 (Shareholders' Equity) to the financial statements included in Part II, Item 8 of our 2019 10-K.

(4) Represents 401(k) matching employer contributions, premiums paid by us under a group life insurance plan, and an allowance for mobile telephone and data service, which includes personal use. These amounts also include post-termination COBRA costs for Messrs. Walsh, Biere and Frith, further discussed below,

(5) Mr. Walsh was appointed as Acting Chief Executive Officer in May 2018 for which he received additional compensation which is included in the 2018 Salary amount. Mr. Walsh resigned from the company in April 2019. The 2019 Salary amount includes $212,224 in severance payments. The amounts in the table reflect all compensation paid to Mr. Walsh during 2018 and 2019, including the period during which Mr. Walsh did not serve as Acting Chief Executive Officer.

(6) Mr. Biere was appointed as Chief Financial Officer in December 2016. Mr. Biere resigned from the company in September 2019. The 2019 Salary amount includes $74,873 in severance payments. In addition, we are subsidizing Mr. Biere's COBRA costs for six months.

(7) Mr. Frith was appointed as Chief Operating Officer in May 2018. Mr. Frith resigned from the company in May 2019. The 2019 Salary amount includes $125,000 in severance payments. The amounts in the table reflect all compensation paid to Mr. Frith during 2018 and 2019, including the period during which Mr. Frith did not serve as Chief Operating Officer.

Employment Agreements with Named Executive Officers

We have agreements with our named executive officers, which include provisions regarding post-termination compensation. We do not have a formal severance policy or plan applicable to our executive officers as a group.

Under our agreement with Mr. Derrickson entered into in February 2019, Mr. Derrickson is entitled to receive an annual salary of $325,000 and is eligible to receive an annual bonus equal to 50% of his annual salary at 100% achievement. He also received an option to purchase 562,500 shares of common stock. In the event Mr. Derrickson's employment is terminated by us when neither cause nor long term disability exists (as such terms are defined in the agreement), subject to execution of a release by Mr. Derrickson of any employment-related claims, he shall be entitled to receive severance equal to nine months of his then annual base salary, continued COBRA coverage at our expense for a period of nine months following his termination date and a pro rata portion of his annual bonus as determined by the Compensation Committee. In the event that, within twelve months after a change of control of BSQUARE (as defined in the agreement), Mr. Derrickson's employment is terminated when neither cause nor long term disability exists or Mr. Derrickson terminates his employment for good reason (as defined in the agreement), subject to execution of a release by Mr. Derrickson of any employment-related claims, he shall be entitled to receive a one-time lump sum severance payment equal to twelve months of his then annual base salary, 100% of his target annual bonus as determined by the Compensation Committee, and continued COBRA coverage at our expense for a period of twelve months following his termination date (provided that, during the first twelve months after a change of control of BSQUARE, such severance payments shall be in lieu of the severance payments described in the preceding sentence, and after expiration of the twelve -month period following a change of control, Mr. Derrickson shall thereafter only be entitled to the severance payments described in the preceding sentence). In addition, immediately prior to a change of control of BSQUARE, all of Mr. Derrickson's unvested stock options and restricted stock units shall become fully vested and immediately exercisable.

Under our agreement with Mr. Wheaton entered into in August 2019, Mr. Wheaton is entitled to receive an annual salary of $275,000 and is eligible to receive an annual bonus of $100,000 at 100% achievement. He also received an option to purchase 129,173 shares of our common stock. In the event that, within twelve months after a change of control of BSQUARE (as defined in the agreement), Mr. Wheaton's employment is terminated when neither cause nor long term disability exists or Mr. Wheaton terminates his employment for good reason (as defined in the agreement), subject to execution of a release by Mr. Wheaton of any employment-related claims, he shall be entitled to receive a one-time lump sum severance payment equal to six months of his then annual base salary, 100% of his target annual bonus as determined by the Compensation Committee, and continued COBRA coverage at our expense for a period of six months following his termination date. In addition, immediately prior to a change of control of BSQUARE, all of Mr. Wheaton's unvested stock options shall become fully vested and immediately exercisable.

As noted above, Mr. Chase resigned as President and Chief Executive Officer in May 2018. Prior to his resignation, under our agreement with Mr. Chase entered into in February 2014, he was entitled to receive an annual salary of $325,000 and was eligible to receive an annual bonus equal to 77% of his annual salary at 100% achievement. He also received 7,500 restricted stock units ("RSUs") and options to purchase 165,000 shares of our common stock. Mr. Chase's annual salary was increased to $386,250 effective in 2018. The agreement also contained certain severance benefits. However, in connection with the termination of Mr. Chase's employment in May 2018, we entered into a separation and release agreement, pursuant to which we agreed to pay severance in an amount equal to 12 months of his base salary and to subsidize Mr. Chase's COBRA costs for 12 months.

As noted above, Mr. Walsh resigned from the company in April 2019. Prior to his resignation, under our agreement with Mr. Walsh entered into in June 2015, Mr. Walsh was entitled to receive an annual salary of $212,000 and was eligible to receive an annual bonus equal to 35% of his annual salary at 100% achievement. He also received 5,000 RSUs and options to purchase 80,000 shares of our common stock. The agreement also contained certain severance benefits. However, in connection with the termination of Mr. Walsh's employment in April 2019, we entered into a separation and release agreement, pursuant to which we agreed to pay severance to Mr. Walsh in an amount equal to 12 months of his base salary plus the average monthly cash bonuses paid to Mr. Walsh during the six months immediately prior to his termination, and we are subsidizing Mr. Walsh's COBRA costs for 12 months.

As noted above Mr. Biere resigned from the company in September 2019. Prior to his resignation, under our agreement with Mr. Biere entered into in November 2016, Mr. Biere was entitled to receive an annual salary of $270,000 and was eligible to receive an annual bonus equal to 50% of his annual salary at 100% achievement. He also received 7,500 RSUs and options to purchase 100,000 shares of our common stock. Mr. Biere's annual salary was increased to $278,100 in 2018. The agreement also contained certain severance benefits. However, in connection with the termination of Mr. Biere's employment in September 2019, we entered into a separation and release agreement, pursuant to which we agreed to pay severance to Mr. Biere in an amount equal to six months of his base salary and we are subsidizing Mr. Biere's COBRA costs for six months.

As noted above, Mr. Frith resigned from the company in May 2019. Prior to his resignation, under our agreement with Mr. Frith entered into in August 2016 and amended in June 2018, Mr. Frith was entitled to receive an annual salary of $215,000 and was eligible to receive an annual bonus equal to 35% of his annual salary at 100% achievement. He also received a signing bonus of $40,000, 5,000 RSUs and options to purchase 80,000 shares of our common stock. The agreement also contained certain severance benefits. However, in connection with the termination of Mr. Frith's employment in May 2019, we entered into a separation and release agreement, pursuant to which we agreed to pay severance to Mr. Frith in an amount equal to six months of his base salary and $60,000 of his previously announced retention incentive bonus, and to subsidize Mr. Frith's COBRA costs for six months.

Determination of Compensation

The Compensation Committee's philosophy regarding total executive compensation has been to provide a comprehensive and competitive compensation package consisting of base salary, short-term cash incentives (STI) and long-term equity incentives (LTI) that helps align management team incentives with shareholder interests and promote growth in shareholder value. Base salary and STI represents total targeted cash compensation (TTC) for each executive. The Compensation Committee has been gradually increasing the level of STI for each executive to bring the TTC level closer to market peer median levels over the last several years based on input from an outside compensation consultant (as further described below). We believe that while our executive base salaries are generally slightly below median level, TTC is generally near median levels. We also periodically review the level of LTI for each of our executive team with our outside compensation consultant. Historically, our level of LTI has been below market peer median levels. We intend to review executive compensation survey information each year to maintain competitive levels of compensation for our management team.

Total Compensation

For purposes of evaluating executive officer total compensation including base salary, discretionary bonus, equity awards and incentive compensation, the Compensation Committee primarily considers two factors:

- *Competitive level*: The Compensation Committee has the authority to engage its own advisers to assist in carrying out its responsibilities. Historically the Compensation Committee has engaged a compensation consultant to review and assess the market competitiveness of our executive compensation programs.
- *Company and individual performance objectives*: In addition to considering compensation levels of executives at similarly sized regional public companies, the Compensation Committee, in conjunction with the Chief Executive Officer, historically reviews our financial performance objectives as well as non-financial performance objectives applicable to each executive (other than the Chief Executive Officer). Our financial performance objectives are typically determined through collaboration with the Chief Executive Officer, the Board of Directors and the Compensation Committee. The non-financial performance objectives applicable to each executive officer (other than the Chief Executive Officer) are typically determined in collaboration with the Chief Executive Officer, the executive officer and the Compensation Committee. The Compensation Committee determines the financial and non-financial performance objectives applicable to the Chief Executive Officer. These objectives and associated awards have historically been addressed through annual bonuses with respect to our executive officers.

Base Salary and Discretionary Bonus

The Compensation Committee's goal is to provide a competitive base salary for our executive officers. The Compensation Committee has not established any formal guidelines for purposes of setting base salaries (such as payment at a particular percentile of a benchmark group), but instead considers the general market compensation data along with our performance and the individual's performance and experience in determining what represents a competitive salary. The Compensation Committee also considers these factors in its recommendations to the Board of Directors regarding whether and in what amounts to award discretionary cash bonuses, apart from cash awards that may be provided for under incentive plans.

Short-Term Incentive Plan Compensation (STI)

Our named executive officers also historically receive short-term incentive compensation, including annual bonuses, the terms of which vary from year to year.

On March 16, 2020, upon the recommendation of the Compensation Committee, our Board of Directors adopted the BSQUARE Corporation Executive Bonus Plan ("EBP"), which formalized the Company's historical practice of awarding annual bonuses to certain key executives of the Company based on achievement of specified performance goals. The Board designated the Committee as the administrator of the EBP (the "Administrator"). The Administrator may establish performance goals that relate to financial, operational or other performance of the Company, or to any other performance goal established by the Administrator in connection with a potential bonus payment (the "Performance Goals"). Pursuant to the EBP, the Administrator established Performance Goals for 2020 relating to segment revenues and contribution margin and working capital levels. Following completion of the 2020 Performance Period, the amounts payable to each Covered Executive under the EBP will be based entirely on the determination of the Administrator regarding the level of achievement of the Performance Goals. The Administrator has authority to revise or refine the Performance Goals in its discretion. The EBP was also reassessed and restructured to more tightly align compensation with both short- and long-term shareholder interests and to be responsive to prior shareholder advisory votes on executive compensation.

Long-Term Equity Incentive Awards (LTI)

Longer-term incentives in the form of grants of stock options, restricted stock, RSUs and other forms of equity instruments to executive officers are governed by the Stock Plan or our 2011 Inducement Award Plan (the "Inducement Plan"), as applicable.

The Compensation Committee grants stock options and other forms of equity incentive compensation to our executive officers under the Stock Plan or Inducement Plan. Stock options have historically been granted at the time of hire of an executive officer under the Inducement Plan, although we stopped using the Inducement Plan in 2019. Further, the Compensation Committee periodically reviews the equity ownership of the executive officers and may determine that additional awards of equity instruments under the Stock Plan are warranted based on a number of factors, including competitive factors , company performance and individual performance, the vested status of currently outstanding equity awards, the executive's equity ownership in relation to the other executives and other factors. The Compensation Committee maintains no formal guidelines for these periodic reviews. Stock options are awarded with exercise prices equal to the closing market price per share of our common stock on the grant date. Other than the awards payable to Messrs. Derrickson and Wheaton when they joined us during 2019, there were no grants of stock options or awards of RSUs to our named executive officers during 2019.

Other Compensation and Perquisites

Executive officers, including the named executive officers, are eligible to participate in standard benefit plans available to all employees including our 401(k)-retirement plan, medical, dental, disability, vacation and sick leave and life and accident insurance. The same terms apply to all employees for these benefits except where the value of the benefit may be greater for executives because they are more highly compensated than most other employees (e.g., disability benefits). We do not provide any pension or deferred compensation benefits to our executive officers.

Outstanding Equity Awards at Fiscal Year End

The following table presents the outstanding equity awards held by the named executive officers as of December 31, 2019:

	Option Awards				
		Number of Securities Underlying Unexercised Options			
Name	Grant Date	Exercisable (#)	Unexercisable (#)	Option Exercise Price ($) (1)	Option Expiration Date (2)
Ralph C. Derrickson	3/11/2019	93,750	281,250	$ 1.97	3/11/2029
	3/11/2019	—	187,500	$ 1.97	3/11/2029
Christopher Wheaton	9/09/2019	—	129,173	$ 1.27	9/09/2029

(1) The option exercise price is the closing price of our common stock on the grant date.
(2) All options outstanding expire ten years from the grant date.

Employee Benefit Plans

Equity Compensation Plan Information

The following table presents certain information regarding our common stock that may be issued upon the exercise of options and vesting of restricted stock units granted to employees, consultants or directors as of December 31, 2019:

	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	810,912 (1)	$ 3.80	1,527,578
Equity compensation plans not approved by security holders	846,760 (2)	$ 1.87	202,458 (3)

(1) Amount includes 112,846 restricted stock units granted and unvested as of December 31, 2019.
(2) Amount includes no restricted stock units granted and unvested as of December 31, 2019.
(3) Indicates shares of our common stock reserved for future issuance under the Inducement Plan. The Inducement Plans allow us to grant options, restricted stock, restricted stock units and certain other equity-based compensation in connection with hiring new employees. The number of shares reserved for issuance may be modified by the Board of Directors, subject to SEC and NASDAQ limitations. There were 791,673 options and no restricted stock units granted under the Inducement Plan during 2019. Following these awards, we determined to stop using the Inducement Plan in 2019.

401(k) Plan

We maintain a tax-qualified 401(k) employee savings and retirement plan for eligible U.S. employees. Eligible employees may elect to defer a percentage of their eligible compensation in the 401(k) plan, subject to the statutorily prescribed annual limit. We may make matching contributions on behalf of all participants in the 401(k) plan in the amount equal to one-half of the first 6% of an employee's contributions. Company matching contributions and employee contributions are fully vested at all times. We intend the 401(k) plan to qualify under Sections 401(k) and 501 of the Internal Revenue Code of 1986, as amended, so that contributions by employees or us to the 401(k) plan and income earned, if any, on plan contributions are not taxable to employees until withdrawn from the 401(k) plan (except as regards Roth contributions), and so that we will be able to deduct our contributions when made. The trustee of the 401(k) plan, at the direction of each participant, invests the assets of the 401(k) plan in any of a number of investment options.

STOCK OWNERSHIP

Security Ownership of Principal Shareholders, Directors and Management

The following table sets forth certain information regarding the beneficial ownership of our common stock as of March 15, 2020 by:

- each person who is known by us to own beneficially more than five percent (5%) of the outstanding shares of common stock;
- each of our directors;
- each of the named executive officers; and
- all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. The number of shares listed below under the heading "Total Common Stock Equivalents" is the aggregate beneficial ownership for each shareholder and includes:

- common stock beneficially owned;
- restricted stock awards;
- currently vested options; and
- stock options and restricted stock units that are not currently vested but will become vested within 60 days after March 15, 2020.

Of this total amount, the number of shares of common stock underlying options that are currently vested and stock options and restricted stock units that are not currently vested but will become vested within 60 days after March 15, 2020 are deemed outstanding for the purpose of computing the percentage ownership of common stock outstanding beneficially owned by a shareholder, director or executive officer (the "Deemed Outstanding Shares") and are also separately listed below under the heading "Number of Shares Underlying Options and RSUs," but the Deemed Outstanding Shares are not treated as outstanding for the purpose of computing the percentage ownership of common stock outstanding beneficially owned by any other person. This table is based on information supplied by officers, directors, and filings made with the SEC. Percentage ownership is based on 13,098,718 shares of common stock outstanding as of March 15, 2020.

Unless otherwise noted below, the address for each shareholder listed below is c/o BSQUARE Corporation, 110 110th Avenue NE, Suite 300, Bellevue, Washington 98004. Unless otherwise noted, each of the shareholders listed below has sole investment and voting power with respect to the common stock indicated, except to the extent shared by spouses under applicable law.

Name and Address of Beneficial Owner	Total Common Stock Equivalents	Number of Shares Underlying Options and RSUs (Deemed Outstanding Shares)	Percentage of Common Stock Equivalents
5% Owners:			
Palogic Value Management, L.P (1)	1,468,415	—	11.2%
5310 Harvest Hill Road, Suite 110			
Dallas, TX 75230			
Renaissance Technologies LLC (2)	954,023	—	7.3%
800 Third Avenue			
New York, NY 10022			
Richard Karp (4)	800,000	—	6.1%
TicTran Corp			
8498 Independence Ave			
Mountain View, CA 94043			
Dimensional Fund Advisors LP (3)	653,956	—	5.0%
Building One, 6300 Bee Cave Road			
Austin, TX 78746			
Directors and Named Executive Officers:			
Ryan L. Vardeman (5)	1,511,124	21,875	11.7%
Andrew S.G Harries	259,931	25,000	2.2%
Ralph C. Derrickson	98,750	15,625	*
Robert J. Chamberlain	68,299	25,000	*
Davin W. Cushman	61,128	18,750	*
Mary Jesse	60,868	25,000	*
Robert J. Peters (6)	45,474	21,875	*
Christopher Wheaton	—	—	*
Kevin T. Walsh	—	—	*
Peter J. Biere	—	—	*
Giles Frith	—	—	*
All executive officers and directors as a group	2,204,324	168,750	17.9%

* Less than one percent.

(1) The indicated ownership is based solely on (i) a Schedule 13D/A filed with the SEC on March 10, 2020, according to which Palogic Value Management, L.P., Palogic Value Fund, L.P., Palogic Capital Management, LLC and Mr. Vardeman then had shared voting and dispositive power such shares.

(2) The indicated ownership is based solely on a Schedule 13G/A filed with the SEC on February 13, 2020 (the "RT 13G/A") according to which each of Renaissance Technologies LLC and Renaissance Technologies Holdings Corporation has sole voting power and dispositive power over such shares.

(3) The indicated ownership is based solely on a Schedule 13G filed with the SEC on February 12, 2020 according to which Dimensional Fund Advisors LP has sole voting power over 640,354 shares and sole dispositive power over 653,956 shares. Dimensional Fund Advisors LP, an investment adviser registered under Section 203 of the Investment Advisors Act of 1940, furnishes investment advice to four investment companies registered under the Investment Company Act of 1940, and serves as investment manager or sub-adviser to certain other commingled funds, group trusts and separate accounts (such investment companies, trusts and accounts, collectively referred to as the "Funds"). In certain cases, subsidiaries of Dimensional Fund Advisors LP may act as an adviser or sub-adviser to certain Funds. In its role as investment advisor, sub-adviser and/or manager, Dimensional Fund Advisors LP or its subsidiaries (collectively, "Dimensional") may possess voting and/or investment power over securities that are owned by the Funds and may be deemed to be the beneficial owner of shares held by the Funds. However, all such securities are owned by the Funds. Dimensional disclaims beneficial ownership of such securities.

(4) The indicated ownership is based solely on a Schedule 13G/A filed with the SEC on June 25, 2019.

(5) Mr. Vardeman is a principal of and may be deemed to beneficially own securities beneficially owned by Palogic Capital Management.

(6) Mr. Peters is a principal of Palogic Capital Management but does not have dispositive or voting power over shares beneficially owned by Palogic Capital Management.

Hedging and Pledging Activities

Pursuant to our Insider Trading Policy, we strongly discourage all employees from engaging in any form of hedging transactions, such as prepaid variable forwards, equity swaps, collars and exchange funds. We believe facing the full risks and rewards of ownership is important to aligning the objectives of employees with our other shareholders. Any employee wishing to enter into such a hedging transaction must obtain pre-clearance at least two weeks in advance and set forth a justification for the proposed transaction.

We also prohibit pledging of securities in a margin account or as collateral for a loan. Because the timing of any need by the secured party to foreclose on the pledged shares is inherently uncertain, we believe there is unacceptable risk that a margin or foreclosure sale could occur at a time when the pledgor is aware of material nonpublic information.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

There were no transactions since January 1, 2019, nor are there any proposed transactions as of the date of this proxy statement, as to which the amount involved exceeds $120,000 and in which any related person has or will have a direct or indirect material interest, other than equity and other compensation, termination and other arrangements which are described above under the headings “2019 Director Compensation” and “Executive Officer Compensation.”

PROPOSAL NO. 2

ADVISORY VOTE ON EXECUTIVE COMPENSATION

On an annual basis, we provide our shareholders with the opportunity to vote to approve, on an advisory basis, the compensation of our named executive officers as disclosed in this proxy statement in accordance with the compensation disclosure rules of the SEC.

This advisory vote, commonly referred to as a “say-on-pay” vote, is not binding on us, our Board of Directors or our Compensation Committee. Moreover, the vote on this resolution is not intended to address any specific element of compensation, but rather relates to the overall compensation of our named executive officers, as disclosed in this proxy statement in accordance with the compensation disclosure rules of the SEC. However, while this vote is advisory and not binding on us, we will consider the views of our shareholders when determining executive compensation in the future, including seeking to determine the causes of any significant negative voting results to better understand issues and concerns. For example, we have revised several pay practices in 2019 in light of the voting results at our 2019 annual meeting of shareholders.

Executive compensation is an important matter for us and for our shareholders. The core of our executive compensation philosophy and practice continues to be pay for performance. As discussed above under the heading “Executive Officer Compensation,” our executive compensation programs are based on practices that require achievement of challenging goals – goals that will drive us to achieve profitable revenue growth and market share gains, while expanding the global market opportunity for our products, technology and services portfolio, and ultimately leading to long-term shareholder value. We believe our compensation programs are strongly aligned with the long-term interests of our shareholders and have been and will continue to be effective in incenting the achievement and performance of our executive officers. Compensation of our executive officers is designed to enable us to attract and retain talented and experienced senior executives to lead us successfully in a competitive environment.

In particular, we believe the following demonstrates our commitment to responsible compensation practices:

- In light of our performance, we have not awarded bonuses for our performance in 2018 or 2019.
- We formalized our annual bonus process by adopting our EBP, to be administered by our fully independent Compensation Committee, with awards to be based on pre-established company performance objectives that are carefully tied to strategic measures that drive long-term value and growth.
- Annual bonus awards under our EBP may be issued in equity than cash, further aligning long-term incentives of management with those of our shareholders.

- As part of our One Bsquare initiatives, which revised our go-to-market strategy and focused on offering customers an edge-to-cloud product and service suite, we eliminated positions in our senior leadership, which materially decreased total executive compensation expenses.
- We stopped using our Inducement Plan in 2019, in favor of using our shareholder-approved Stock Plan for all equity incentive awards, including those to new hires.
- We do not “gross up” any tax payment obligation in the event that payments to executives would subject them to the IRS parachute excise tax.
- We do not generally provide for accelerated vesting of equity awards for participants in the event of a change in control, although we may do so in certain cases.
- We seek and obtain input from our shareholders regarding our executive compensation programs, and we hold annual “say-on-pay” votes to allow all shareholders communicate their approval or disapproval or executive compensation.

We believe these and other practices demonstrate our commitment to pay for performance, to aligning compensation with long-term value creation, and to listening to our shareholders about compensation matter and taking action.

Our named executive officers and their compensation is described above under the heading “Executive Officer Compensation,” including our compensation philosophy and objectives and the fiscal 2019 compensation of the named executive officers.

We are asking shareholders to vote on the following resolution:

“Resolved, that the shareholders approve, on an advisory basis, the compensation of the Company’s named executive officers as disclosed in the proxy statement for the 2020 Annual Meeting of Shareholders pursuant to the compensation disclosure rules of the SEC.”

Vote Required

Approval on an advisory basis of the compensation of our named executive officers as disclosed in this proxy statement in accordance with the compensation disclosure rules of the SEC requires that the votes cast in favor of the proposal exceed the votes cast against the proposal.

As indicated above, the shareholder vote on this resolution will not be binding on us, the Compensation Committee or the Board of Directors, and will not be construed as overruling any decision by us, the Compensation Committee or the Board. The vote will not be construed to create or imply any change to our fiduciary duties or those of the Compensation Committee or the Board, or to create or imply any additional fiduciary duties for us, the Compensation Committee or the Board.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR” PROPOSAL NO. 2.

PROPOSAL NO. 3

RATIFY APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The independent registered public accounting firm of Moss Adams LLP (“Moss Adams”) has acted as our auditor since May 2006 and has audited our financial statements for the years ended December 31, 2019 and 2018. Moss Adams is responsible for performing an independent audit of our consolidated financial statements in accordance with auditing standards generally accepted in the United States and issuing a report on its audit. A representative of Moss Adams is expected to join the Annual Meeting by conference call, where he or she will have the opportunity to make a statement and to respond to appropriate questions.

The Audit Committee’s charter provides that it shall have the sole authority and responsibility to select, evaluate and, if necessary, replace our independent registered public accounting firm. The Audit Committee has selected Moss Adams as our independent registered public accounting firm for the year ending December 31, 2020.

The Audit Committee pre-approves all audit and non-audit services performed by our auditor and the fees to be paid in connection with such services in order to assure that the provision of such services does not impair the auditor’s independence. Unless the Audit Committee provides general pre-approval of a service to be provided by the auditor and the related fees, the service and fees must receive specific pre-approval from the Audit Committee.

INDEPENDENT AUDITORS

Audit Fees

Moss Adams billed us for audit fees of $272,840 and $285,837 for the years ended December 31, 2019 and 2018, respectively. These audit fees related to professional services rendered in connection with the audit of our annual consolidated financial statements, the reviews of the consolidated financial statements included in each of our quarterly reports on Form 10-Q and accounting services that relate to the audited consolidated financial statements and are necessary to comply with generally accepted auditing standards.

Audit-Related Fees

There were no fees billed for fiscal years 2018 or 2018 for assurance and related services by Moss Adams that were reasonably related to the performance of its audit of our financial statements and not reported under the caption "Audit Fees."

Tax Fees

There were no fees billed for fiscal years 2019 or 2018 for tax compliance, tax advice or tax planning services rendered to us by Moss Adams.

All Other Fees

Moss Adams billed us $40,573 and $33,162 in 2019 and 2018, respectively, in fees associated with a SOC Type-2 examinations.

Audit Committee Report

In connection with the financial statements of BSQUARE Corporation (the "Company") for the fiscal year ended December 31, 2019, the Audit Committee of the Board of Directors of the Company (the "Board") has:

- Reviewed and discussed the audited financial statements with management of the Company;
- Discussed with the Company independent registered public accounting firm, Moss Adams LLP (the "Firm"), the matters required to be discussed by applicable auditing standards; and
- Received the written disclosures and the letter from the Firm required by applicable requirements of the Public Company Accounting Oversight Board regarding the Firm's communications with the Audit Committee concerning independence and discussed with the Firm its independence.

Based upon these reviews and discussions, the Audit Committee recommended to the Board that the Company's audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2019 for filing with the SEC.

Submitted by the Audit Committee:

Robert J. Chamberlain, Chair
Andrew S.G. Harries
Mary Jesse

Vote Required

The ratification of the appointment of Moss Adams LLP as our independent registered public accounting firm requires that the votes cast in favor of the proposal exceed the votes cast against the proposal.

THE BOARD OF DIRECTORS RECOMMENDS THAT SHAREHOLDERS VOTE FOR RATIFICATION OF THE APPOINTMENT OF MOSS ADAMS LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2020.

OTHER MATTERS

Shareholder Communications with the Board of Directors

Our shareholders may, at any time, communicate in writing with any member or group of members of the Board of Directors by sending such written communication to the attention of our Secretary by regular mail to our principal executive offices, email to investorrelations@bsquare.com or facsimile at 425-519-5998.

Copies of written communications received by our Secretary will be provided to the relevant director(s) unless such communications are considered, in the reasonable judgment of our Secretary, to be improper for submission to the intended recipient(s). Examples of shareholder communications that would be considered improper for submission include, without limitation, customer complaints, solicitations, communications that do not relate directly or indirectly to us or our business, or communications that relate to improper or irrelevant topics.

Board Attendance at Annual Shareholder Meetings

The Chairperson of the Board of Directors is expected to make all reasonable efforts to attend our annual shareholder meeting. If the Chairperson is unable to attend an annual shareholder meeting for any reason, at least one other member of the Board of Directors is expected to attend. Other members of the Board of Directors are expected to attend our annual shareholder meeting if reasonably possible. For our 2020 Annual Meeting, we are encouraging our directors to join via the conference call rather than attend in-person. All of our then current directors attended the 2019 Annual Meeting of Shareholders.

Transaction of Other Business

Our Board of Directors knows of no other matters to be submitted at the Annual Meeting. If any other business is properly brought before the Annual Meeting, proxies will be voted in respect thereof as the proxy holders deem advisable.

Annual Report to Shareholders and Form 10-K

Our Annual Report to Shareholders for the year ended December 31, 2019 is being distributed to our shareholders with this proxy statement. A copy of our Annual Report on Form 10-K for the year ended December 31, 2019, without exhibits, is included with the Annual Report to Shareholders.

By Order of the Board of Directors

Christopher Wheaton
Chief Financial Officer, Secretary and Treasurer
Bellevue, Washington
April 28, 2020

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2019

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____to

Commission file number: 000-27687

BSQUARE CORPORATION

(Exact name of registrant as specified in its charter)

Washington	**91-1650880**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

110 110th Avenue NE, Suite 300, Bellevue, Washington 98004

(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (425) 519-5900

Securities registered pursuant to Section 12(b) of the Act:

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, no par value	BSQR	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☑

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 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 a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☑ Smaller reporting company ☑ Emerging growth company ☐

If an emerging growth company, 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. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The aggregate market value of common stock held by non-affiliates of the registrant on June 30, 2019 was approximately $11.8 million and was determined using the closing price of our common stock on that same date per the NASDAQ Stock Market ($1.16). The number of shares of common stock outstanding as of January 31, 2020: 13,042,293

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement to be delivered to shareholders in connection with the 2020 annual meeting of shareholders are incorporated by reference into Part III of this Annual Report on Form 10-K.

BSQUARE CORPORATION

FORM 10-K

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this Annual Report on this Form 10-K (“Form 10-K”) are not purely historical statements, discuss future expectations, contain projections of results of operations or financial condition, or state other forward-looking information. Those statements are subject to known and unknown risks, uncertainties, and other factors that could cause the actual results to differ materially from those contemplated by the statements. The “forward-looking” information is based on various factors and was derived using numerous assumptions. In some cases, you can identify these so-called forward-looking statements by words like “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” “seeks” or “continue” or the negative of those words and other comparable words. You should be aware that those statements only reflect our predictions and are subject to risks and uncertainties. Actual events or results may differ substantially. Important factors that could cause our actual results to be materially different from the forward-looking statements include (but are not limited to) the following:

1) risks associated with the operation of our business generally, including:
   a) customer demand for our services and solutions;
   b) maintaining a balance of our supply of skills and resources with customer demand;
   c) effectively competing in a highly competitive market;
   d) protecting our customers’ and our data and information;
   e) risks from international operations including fluctuations in exchange rates;
   f) obtaining favorable pricing to reflect services provided;
   g) adapting to changes in technologies and offerings;
   h) risk of loss of one or more significant software vendors;
   i) making appropriate estimates and assumptions in connection with preparing our consolidated financial statements;
   j) maintaining effective internal controls; and
   k) changes to tax levels, audits, investigations, tax laws or their interpretation;
2) the impact of the general economy and economic and political uncertainty on our business;
3) risks associated with potential changes to federal, state, local and foreign laws, regulations, and policies;
4) risks associated with managing growth organically and through acquisitions;
5) risks associated with servicing our debt, the potential impact on the value of our common stock from the conditional conversion features of our debt and the associated convertible note hedge transactions;
6) legal liabilities, including intellectual property protection and infringement or the disclosure of personally identifiable information; and
7) the risks detailed from time to time within our filings with the Securities and Exchange Commission (the “SEC”).

This discussion is not exhaustive but is designed to highlight important factors that may impact our forward-looking statements. Because the factors referred to above, as well as the statements included under the heading “Risk Factors” in this Form 10-K, including documents incorporated by reference therein and herein, could cause actual results or outcomes to differ materially from those expressed in any forward-looking statement made by us or on our behalf, you should not place undue reliance on any forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. We are under no duty to update any of the forward-looking statements after the date of this Form 10-K to conform such statements to actual results.

All forward-looking statements, express or implied, included in this report and the documents we incorporate by reference and that are attributable to Bsquare Corporation and its subsidiaries (collectively, “we,” “us,” “Bsquare,” or the “Company”) are expressly qualified in their entirety by this cautionary statement. This cautionary statement should also be considered in connection with any subsequent written or oral forward-looking statements that the Company or any persons acting on our behalf may issue.

PART I

Item 1. *Business.*

Overview

We believe the promise of Internet of Things ("IoT") will be realized through the development of intelligent devices and systems that are cloud-enabled, contribute critical data, facilitate distributed control and decision making, and operate securely at scale. The opportunity to help companies transform their businesses and operations through these intelligent systems is enormous, and Bsquare offers a unique combination of expertise in device-level solutions, embedded operating systems, and IoT software and services. Since our founding in 1994, Bsquare has been at the intersection of hardware and software. Today that intersection is the "edge" where cloud-enabled devices connect to create intelligent systems that share data, facilitate distributed control and machine learning, and operate securely at scale. From device hardware, to the operating system, to IoT software solutions, and cloud services that make intelligent systems possible, Bsquare's expertise, products and services are at the center of digital transformation.

While 2019 was a year of transition for Bsquare, we expect 2020 to be a year of focus and discipline as we seek to accelerate the recovery we started in 2019. With an entrepreneurial leadership team in place we anticipate a return to revenue growth and predictability. In 2019 we established a foundation that will allow Bsquare to more readily take advantage of growth opportunities as they become apparent.

Our Partner Solutions business segment is a strong source of both cash and important partner and customer relationships. We are uniquely positioned as a software-only Microsoft distributor. Because we sell operating system ("OS") software decoupled from hardware, we can partner with a wide range of customers, especially those who are concerned about procuring their software from a potential hardware competitor. Nearly every customer that has been buying OS software is now contemplating their IoT strategy and our longstanding relationship allows us to cross sell our Edge to Cloud products and services.

The distribution market is also changing dramatically. Our customers' products, essentially hardware and associated software, cannot be sold, installed, and then forgotten. Today, our customers constantly seek to maintain and optimize the operating system, firmware, and software in their products. Further, these devices are increasingly becoming a part of complex networks, what is often referred to as IoT, and what we call intelligent systems. This evolution is creating new opportunities for our business. Our software and edge expertise combined with our position as a supply chain partner makes us uniquely suited to address these complex requirements.

In our Edge to Cloud business segment, we plan to expand on the valuable experience we gained serving our large customers in 2019 building and operating their IoT solutions at scale. Our B2IQ software and consulting suite and our improved engineering methodologies create a foundation upon which we can build and grow this business segment. We plan to continue to invest in creating an agile and quality-oriented customer service function that will become an integral part of our customers' IoT operations, allowing our customers to rely on Bsquare to ensure that their products are well designed and can operate in a fully connected IoT-enabled world.

In pursuing revenue growth in both segments, we seek to exploit what we believe to be the obvious synergy between our two core businesses.

We were incorporated in the State of Washington in July 1994. Our principal office is located at 110 110th Avenue NE, Suite 300, Bellevue, Washington 98004, and our telephone number is (425) 519-5900. Our website address is www.bsquare.com. Information contained on or that can be accessed through our website is not a part of this Form 10-K.

Partner Solutions Business Segment

Customers engage us because of our long history as a Microsoft OS distribution and technology partner and our industry leading technical expertise in OS image development, device software development and testing, and embedded and mobile operating systems design. We believe that engaging us on a new device design typically results in shorter development cycles and reduced time-to-market, lower overall costs to complete projects, and enhanced product robustness and features, which a customer may otherwise have been unable to achieve.

Market

Our target market includes makers of connected, intelligent computing devices such as point-of-sale terminals, kiosks, tablets and handheld data collection devices, smart vending machines, ATM machines, essential equipment in buildings and facilities environments, digital signs and in-vehicle telematics and entertainment devices. These devices utilize various operating system software including Microsoft Windows IoT, Android, Linux, or QNX, and are typically connected to a network via a wired or wireless connection. Our customers, for these smart devices, include world-class original equipment manufacturers ("OEMs"), original design manufacturers ("ODMs"), corporate enterprises ("Enterprises"), silicon vendors ("SVs") and peripheral vendors.

Software Distribution

We have distribution agreements with multiple third-party software vendors. Our ability to resell these third-party software products, whether as stand-alone products or in conjunction with our own proprietary software and engineering service offerings, provides our customers with a comprehensive solution source for their device project needs. Our primary third-party software offerings include the following:

- For over 20 years, we have been a Microsoft authorized Value-Added Provider ("VAP") of Windows IoT operating systems and toolkits for the complete line of Windows IoT products, including major product families such as Windows IoT Compact, Windows IoT Standard and Windows IoT Server. Effective March 1, 2019, pursuant to a Global Partnership Agreement with Microsoft, we are authorized to sell Windows IoT operating systems in Canada, the United States, Argentina, Brazil, Chile, Mexico, Peru, Venezuela, Puerto Rico, Columbia, and several Caribbean countries. Of our total revenue, 79% in 2019 and 75% in 2018 resulted from the sale of Windows IoT operating systems. Our existing distribution agreement for sales of Windows IoT operating systems in the European Union ("E.U."), the European Free Trade Association, Turkey and Africa, expired on June 30, 2019 and was not renewed thereafter. We generated approximately 3% of our Partner Solutions software sales under this agreement in 2019.
- We have been a Microsoft authorized VAP of Windows Mobile operating systems since November 2009. Along with Windows Mobile operating systems, we also sell Microsoft's Office Mobile product. We are currently authorized to sell Windows Mobile operating systems and related products in North America, South America, Central America (excluding Cuba), Japan, Taiwan, and the region comprised of Europe, the Middle East, and Africa ("EMEA"). Of our total revenue in 2019, 5% was generated through the sale of Windows Mobile operating systems, compared to 6% in 2018. Our current distribution agreements related to Windows Mobile operating systems expire on April 30, 2022;
- We are an authorized distributor for Adobe Flash technologies and Adobe Reader. We have the right to distribute Adobe Flash Lite licenses on a worldwide basis; and
- We are an authorized distributor of McAfee security software in North America.

The majority of our revenue continues to be derived from reselling Microsoft Windows operating system software to device makers. The sale of Microsoft operating systems has accounted for substantially all of our third-party software revenue historically, including approximately 98% of third-party software revenue in 2019 and 97% in 2018.

Software Products

We offer the following software products (B2IQ OS Utilities) and anticipate developing additional products during the year to compliment the offerings of our partners and address the evolving needs of our customers:

- B2IQ Imaging and Recovery Tool. A turnkey utility for managing the operating system image of a Windows-based device. The graphic user interface facilitates capturing an operating system image, including the Windows operating system and any applications, and simplifies deploying images from external media. It offers a recovery mode that stores an image in a hidden partition, allowing the system to be restored to a working state by a non-technical end user in the field.
- B2IQ Field Upgrade Tool. A streamlined utility for remote, cloud-based upgrades of Windows OEM appliances and devices in the field.

Service Products

Bsquare offers a full suite of professional services to assist our customers with the design, development, and deployment of devices and systems that make use of the software we resell. Typically, our professional services are provided on a time and materials consulting basis, although the Jumpstart service is offered as a package. Our professional services include the following:

- Windows 10 IoT Enterprise Jumpstart. Bsquare plans to build a production-ready system software image for a customer device, including retrieving and installing latest Windows updates. We also offer live Windows 10 IoT Enterprise training.
- Image build. Bsquare plans to build a production-ready Linux or Android system software image with the latest OS updates. We develop the image, configure it on the target device, and install customers' OEM drivers and software.
- OS upgrade and porting services. Bsquare helps modernize our customers' operating systems by upgrading within an operating system family or porting to alternate operating system platforms.

- Embedded OS Support Services. Bsquare provides support for embedded operating systems and we have direct access to premium Microsoft Embedded Operating System support.
- Field upgrade consulting. Bsquare provides support for customers upgrading their devices and systems reducing the cost and complexity of field upgrades.
- OS lockdown services. Bsquare helps customers configure their operating system software, especially older non-supported operating systems such as Windows 7, to disable access points that could corrupt the system or lead to intrusion.
- Microsoft Azure Sphere engineering – Bsquare is one of the first ten technical engineering partners approved in the new Azure Sphere ecosystem. We speed integration of Azure Sphere with new devices being developed or as a bolt-on to existing deployed assets.

Relationship with Microsoft

We have a long-standing relationship with Microsoft and this relationship is important to the continuing success of our business. Our credentials as a Microsoft partner include:

- We have been one of Microsoft's largest distributors of Windows IoT operating systems for over 20 years;
- We have been a distributor of Microsoft's Windows Mobile operating systems since November 2009;
- We were the OED Americas Channel Sales & Marketing Award recipient for Distributor Sales Excellence in 2013;
- We are a Silver Data Analytics partner;
- We are a Silver Data Platform partner;
- We are a Co-Sell Ready ISV Partner for Microsoft; and
- Microsoft has engaged us from time to time on various engineering service engagements.
- We work closely with Microsoft executives, developers, product managers and sales personnel. We leverage these relationships in a variety of ways, including:
- We gain early access to new Microsoft embedded software and other technologies;
- We leverage co-marketing resources, content and strategies from Microsoft, including market development funds, to support our own marketing and sales efforts;
- We participate in Microsoft-sponsored trade shows, seminars, and other events;
- We receive sales leads from Microsoft; and
- We receive rebates from Microsoft based upon the achievement of predefined sales objectives.

See Item 1A, "Risk Factors," for more information regarding our relationship with Microsoft.

Competition

Microsoft controls who can distribute its OS software. Authorized distributors that we complete with include the following:

- Arrow Electronics, Inc.
- Avnet, Inc.
- Advantech, Inc.
- Dell Computer, Inc.

Our competition is not limited to the Microsoft-authorized distributors. We compete with other consulting firms for services related to device design and development, system software development, and engineering firms that offer similar services.

Edge to Cloud Business Segment

Customers engage us because of our extensive experience in the areas of device software development and testing, our experience with Microsoft Azure and Amazon Web Service cloud development and operation, our modular suite of IoT development components (B2IQ Suite), our experience serving large IoT customers at scale, and our focus on understanding the return on investment ("ROI") for their IoT projects. We believe that engaging us typically results in shorter development cycles and reduced time-to-market, lower overall costs to complete projects, and enhanced product robustness and features, and a clear ROI for their system.

Market

The IoT market continues to emerge and evolve. This market includes business and industrial segments. It encompasses services, software, hardware, connectivity and cloud providers as well as systems integrators. The IoT marketplace is currently being influenced by the following factors:

- Development of machine learning and data analytics software that advances the understanding of complex systems but lacks the capability to effectively process the proliferation of resulting data.
- Nearly ubiquitous wireless connectivity, including near-field communications (or NFC), Bluetooth, Wi-Fi and cellular, allowing connectivity and data exchange with large populations of small, remote, and frequently mobile devices;
- Increasing competitive pressures that are forcing a wide array of businesses to invest in automation as a way to improve productivity, reduce costs, and enhance the value of their own offerings;
- The increasing availability of inexpensive cloud computing and storage capabilities that are scalable to the extent likely to be demanded by IoT, and;
- The ROI for IoT systems and capabilities. Early customer activity was dominated by "Proof of Concept" or "Prototypes" with unrealistic implementation and operating costs. As the market matures and clear ROI models emerge, such as cost reduction and/or new revenue, we expect the market adoption rate to increase.

Software Products

We offer the following software products and anticipate developing additional products during the year to compliment the offerings of our partners and address the evolving needs of our customers:

- B2IQ Edge and Cloud Suite. The B2IQ Edge to Cloud Suite is a collection of software components that securely connects edge devices and non-connected assets to the cloud, accelerating development of application-specific solutions forming the basis for almost any IoT use case.
- B2IQ Cloud Base. The B2IQ Cloud Base runs on Microsoft Azure and Amazon Web Services ("AWS") and offers automatic registration of B2IQ Edge devices with the cloud.
- B2IQ Edge. The B2IQ Edge is a compact and efficient edge client that supports bi-directional communication between devices, sensors, and cloud components. B2IQ Edge runs on Linux, FreeRTOS devices and Azure Sphere.
- B2IQ Gateway, The B2IQ Gateway supports bi-directional communication between constrained devices and the cloud. B2IQ Gateway runs on Linux devices.
- B2IQ Edge Modules. The B2IQ Edge Modules accelerate connecting B2IQ Edge to the systems and standards our customers' teams have already adopted. We offer the B2IQ Modbus connector for industrial assets, the B2IQ Canbus connector for automotive assets, and the B2IQ SAE 1939 Canbus connector for diesel assets.

Service Products

Bsquare offers a full suite of professional services to assist our customers with the design, development, deployment and operation of their IoT system.

Typically, our professional services are provided on a time and materials consulting basis.

We have developed, deployed, and operated IoT systems for businesses of all sizes, from global Fortune 500 companies to small private organizations. Our professional services include the following:

- Requirements gathering. Working with our customers' stakeholders to identify pain points and understand solutions requirements.
- Architecture. Bsquare structures solutions based on open standards and device industry standard protocols as well as appropriate cloud provider technologies.
- Design. We offer technical design of software and creative design of user interactions.
- Development. Our solutions are built to efficiently connect the edge to the cloud and follow ISO 9001 quality standards.
- Quality Assurance. We provide quality assurance services during all aspects of development, from design to implementation.
- Data science. Bsquare data scientists use machine learning to provide valuable insights such as forecasting breakdowns, detecting anomalies, and predicting demand.
- 24 hours a day / 7 days a week ("24/7") Operations Services. Bsquare provides cloud asset management, system status monitoring, DevOps automation, support, and software maintenance, to ensure our customers' vital systems are secure and meeting business objectives.

Competition

Our competitors in the Edge to Cloud segment, or companies against which we anticipate vying for opportunities, include:

- Large, established enterprise software and solution providers such as IBM, SAS, Oracle and SAP;
- Cloud IoT providers such as AWS and Microsoft Azure. Although we are closely partnered with AWS and Microsoft, there are elements of their solutions with which we compete directly;
- Mid-sized companies engaged in business transitions similar to our own, including PTC ThingWorx; and
- Startups funded to enter the IoT market, including C3IOT and others.

The market for device software and engineering services is competitive. We face competition from the following:

- Our current and potential customers' internal engineering and research and development departments, which may seek to provide their own IoT-related services and/or develop their own software solutions which could compete with our own service offerings and products;
- Engineering service firms, including offshore development companies, such as Adeneo, SymphonyTeleca and Wipro;
- ODMs, particularly those in Taiwan and China, with their own software development capabilities;
- Contract manufacturers with their own software development capabilities;
- Microsoft Windows IoT and Windows Mobile operating system distributors such as Arrow Electronics, Inc. Avnet, Inc. and Synnex Corporation.

Some of our competitors have greater financial and other resources than we do. They may also focus on only one aspect of our business or offer complementary products that can be integrated with our products. As we develop and bring to market new software products and service offerings, we may begin competing with companies with which we have not previously competed. Further, as we expand the geographic markets into which we sell our services and software solutions, or increase our penetration therein, we may expect to increasingly compete with companies with which we have not previously competed. It is also likely that new competitors will enter the market or that our competitors will form alliances, including alliances with AWS or Microsoft, that may enable them to rapidly increase their market share. New competitors may have lower overhead than we do and may be able to undercut our pricing. We expect that competition will increase as other established and emerging companies enter the connected device market, and as new products and technologies are introduced.

Neither AWS nor Microsoft has agreed to an exclusive arrangement with us, nor has either agreed not to compete against us. Amazon may decide to focus on providing products or services that compete directly with our products and services or partnering with other solution providers that compete with us. Microsoft may decide to bring in-house more of the core-embedded development services and expertise that we currently provide, possibly resulting in reduced software and service revenue opportunities for us. The barrier to entering the market as a provider of Microsoft-based smart connected systems software and services is relatively low. In addition, Microsoft has created marketing programs to encourage systems integrators to work on Windows operating system software and services, including in the evolving IoT market. These systems integrators may be given substantially the same access by Microsoft to Microsoft technology as we are.

Sales and Marketing

We market our products and professional engineering services utilizing a direct sales model. We have sales personnel in the United States and in the United Kingdom. Historically, we have not made significant use of resellers, channel partners, representative agents or other indirect channels. Key elements of our sales and marketing strategy include direct marketing, digital marketing, content marketing, trade shows, event marketing, public relations, analyst relations, social media properties, customer and strategic alliance partner co-marketing programs and a comprehensive website.

International Operations

Our international operations outside of North America are conducted through our offices in Trowbridge, England. In the fourth quarter of 2019 we made the decision to close our operation in Taipei, Taiwan. Because our OEM Distribution Agreement with Microsoft for the sale of Microsoft Windows IoT operating systems was previously restricted to North America, the majority of our revenue continues to be generated from North America. Revenue generated from customers located outside of North America was approximately 15% and 6% of total revenue in 2019 and 2018 respectively. Our distribution rights for Microsoft Windows IoT products in the E.U., the European Free Trade Association, Turkey and Africa expired on June 30, 2019.

See Item 1A, “Risk Factors,” and Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” for more information regarding our international operations.

Personnel

We had total headcount of 75 at December 31, 2019; including 48 located in North America, 26 in the United Kingdom, and 1 in Taiwan. As conditions necessitate, professional engineering service employees may perform research and development activities and vice versa.

Intellectual Property and Other Proprietary Rights

We strive to protect our intellectual property rights through patent, copyright, trademark and trade secret laws and through contractual arrangements. While we cannot be certain that our efforts will be effective to prevent the misappropriation of our intellectual property, or to prevent the development and design by others of products or technologies similar to, or competitive with, those developed by us, we plan to continue to pursue appropriate protections for our intellectual property.

Additionally, because a significant portion of our revenue relates to the sale of third-party software products, we also rely on our partners, particularly Microsoft, to appropriately protect their own intellectual property.

See Item 1A, “Risk Factors,” for more information regarding our intellectual property and other proprietary rights.

Available Information

We electronically file with or furnish to the Securities and Exchange Commission (“SEC”) our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. We make available on our website at www.bsquare.com, free of charge, copies of these reports, as soon as reasonably practicable after electronically filing such reports with, or furnishing them to the SEC.

Item 1A. *Risk Factors*.

As discussed under Item 1 of Part I, "Business—Cautionary Note Regarding Forward-Looking Statements," our actual results could differ materially from those expressed in our forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed below. Additional risks and uncertainties not presently known to us, or that we currently deem immaterial but later emerge as material, may also impair our business operations. If any of the following risks occur, our business, financial condition, operating results, cash flows and the trading price of our common stock could be materially adversely affected.

Risks Related to General Business Conditions

If we are not successful in developing and delivering competitive product and services offerings that keep pace with technological changes and needs, or if our engineering services fail to gain or maintain traction with potential customers, our business would be negatively impacted.

In the third quarter of 2019, we initiated an updated go to market product strategy and pragmatic edge-to-cloud sales and marketing message that we believe builds on our history of helping our customers build intelligent devices. We now offer a complete solution that allows our customers to build and operate the next generation of intelligent devices and systems. While we will continue to support our existing DataV solution customer commitments, we have stopped marketing DataV as a specific product offering. Our ability to grow our higher-margin Edge to Cloud segment is contingent on the success of IoT solution components, solution accelerators and engineering services in certain market segments. If the sales cycle in these segments is longer than expected, or if the solutions we offer to these segments fail to gain or maintain traction with potential customers, or if we are not otherwise successful in developing competitive product offerings that keep pace with market requirements, our business would be negatively impacted.

Expected operating efficiencies from our restructuring plans may not be realized as anticipated.

In the second quarter of 2019, we initiated a workforce reduction program intended to reduce expenses and better align our organizational structure with our strategic focus. The program was implemented in stages throughout the remainder of 2019. Factors which may affect the potential operating efficiencies we realize from our restructuring plans include the adverse impact of job eliminations, uncertainties associated with loss of customer and vendor confidence, potential negative impact on sales and customer service as well as factors outside of our control such as changes in the economic environment. We may not realize the anticipated benefits under our restructuring plans, which could result in additional restructuring efforts. If our restructuring plans are not successful, our business and results of operations may be negatively impacted.

If our IoT-related service offerings fail to gain or maintain traction with potential customers our business would be negatively impacted.

Our strategy to focus on expanding our IoT-related service offerings is subject to a number of risks, including those relating to:

- The significant investment of time and financial and other corporate resources required;
- Customer acceptance of our IoT-related service offerings;
- Our ability to cross sell customers;
- The ROI model for IoT, which has proven to be elusive and could further delay adoption of IoT solutions by the market;
- Because IoT services are a relatively new offering, the sales cycle may be longer than we anticipate, and;
- We may be unable to grow our IoT-related services business rapidly enough to contribute to profitability in 2020.

Our marketplace is highly competitive, which may result in price reductions, lower gross profit margins and loss of market share.

The IoT market is still emerging but is already becoming increasingly competitive. Our competitors in this space include, or we anticipate could include, the following:

- Large, established enterprise software and solution providers such as IBM, SAS, Oracle and SAP;
- Cloud IoT providers such as AWS and Microsoft Azure. Although we are closely partnered with AWS and Microsoft, there are elements of their solutions with which we compete directly;
- Mid-sized companies engaged in business transitions similar to our own, including PTC ThingWorx; and
- Startups funded to enter the IoT market, including C3IoT and others.

In addition, we anticipate that we will encounter increasing competition in the growing IoT market from a number of additional software and service providers as we continue to focus on this market in 2019 and beyond, and as we expand our focus on providing IoT-related service offerings.

The market for device software and engineering services is extremely competitive. We face competition from the following:

- Our current and potential customers' internal engineering and research and development departments, which may seek to provide their own IoT services and/or develop their own software solutions which could compete with our IoT-related service offerings and products;
- Engineering service firms, including offshore development companies, such as Adeneo, SymphonyTeleca and Wipro;
- ODMs, particularly those in Taiwan and China, with their own software development capabilities;
- Contract manufacturers with their own software development capabilities;
- Microsoft Windows IoT and Windows Mobile operating system distributors such as Arrow Electronics, Inc. Avnet, Inc. and Synnex Corporation; and

Some of our competitors have greater financial and other resources than we do. They may also focus on only one aspect of our business or offer complementary products that can be integrated with our products. As we develop and bring to market new software products and service offerings, we may begin competing with companies with which we have not previously competed. Further, as we expand the geographic markets into which we sell our services and related software solutions, or increase our penetration therein, we may expect to increasingly compete with companies with which we have not previously competed. It is also likely that new competitors will enter the market or that our competitors will form alliances, including alliances with AWS or Microsoft, that may enable them to rapidly increase their market share. New competitors may have lower overhead than we do and may be able to undercut our pricing. We expect that competition will increase as other established and emerging companies enter the connected device market, and as new products and technologies are introduced.

Neither AWS nor Microsoft has agreed to any exclusive arrangement with us, nor has either agreed not to compete with us. Amazon may decide to focus on providing products or services that compete directly with our products and services or partnering with other solution providers that compete with us. Microsoft may decide to bring more of the core embedded development services and expertise that we provide in-house, possibly resulting in reduced software and service revenue opportunities for us. The barrier to entering the market as a provider of Microsoft-based smart connected system software and services is relatively low. In addition, Microsoft has created marketing programs to encourage systems integrators to work on Windows IoT and Windows Mobile operating system software and services, including in the evolving IoT market. These systems integrators may be given substantially the same access by Microsoft to Microsoft technology as we are.

Our operating results may be adversely affected by changing economic and market conditions and the uncertain geopolitical environment.

Uncertain economic and political conditions in the U.S. and worldwide have from time to time contributed, and may in the future contribute, to volatility in the technology industries at large, particularly in an emerging market such as IoT. These factors could potentially result in reduced demand for our products and services as a result of constraints on IT-related capital spending by our customers; purchasing delays; payment delays adversely affecting our cash flow and revenue; and difficulty in accurate budgeting and planning. If global economic and market conditions, or economic conditions in key markets, remain uncertain or deteriorate, we may experience material impacts on our business, operating results and financial condition.

We may be subject to product liability, infringement or other legal claims that could result in significant costs.

Our software license and service agreements with our customers typically contain provisions designed to limit our exposure to potential product liability, infringement and other legal claims. It is possible, however, that these provisions may be ineffective under the laws of certain jurisdictions or that our customers may not agree to these limitations. Although we have not experienced any product liability or infringement claims to date, as our business focus continues to transition to the sale of our own proprietary products, the sale and support of our products and services may be subject to such claims in the future. There is a risk that any such claims or liabilities may exceed, or fall outside, the scope of our insurance coverage, and we may be unable to obtain adequate liability insurance in the future. A product liability, infringement or other legal claim brought against us, whether successful or not, could negatively impact our business and operating results.

Our common stock has experienced and may continue to experience price and volume fluctuations, which could lead to costly litigation for us and make an investment in us less appealing.

Stock markets are subject to significant price and volume fluctuations that may be unrelated to the operating performance of particular companies and the market price of our common stock may therefore frequently change as a result. In addition, the market price of our common stock has fluctuated and may continue to fluctuate substantially due to a variety of other factors, including quarterly fluctuations in our results of operations (including as a result of fluctuations in our revenue recognition), our ability to execute on our current growth strategy in a timely fashion, announcements about technological innovations or new products or services by us or our competitors, market acceptance of new products and services offered by us, developments in the IoT market, changes in our relationships with our suppliers or customers, our ability to meet analysts' expectations, changes in the information technology environment, changes in earnings estimates by analysts, sales of our common stock by existing holders and the loss of key personnel. In the past, following periods of volatility in the market price of a company's stock, class action securities litigation has often been instituted against such companies. Such litigation, if instituted against us, could result in substantial costs and diversion of management's attention and resources, which would materially adversely affect our business, financial condition and operating results.

Past acquisitions have proven difficult to integrate, and future acquisitions, if any, could disrupt our business, dilute shareholder value and negatively affect our operating results and may not accrete to our revenue or other operating results or to our business generally.

We have acquired the technologies, assets and/or operations of other companies in the past and may acquire or make investments in companies, products, services and technologies in the future as part of our growth strategy. If we fail to properly evaluate, integrate and execute on our acquisitions and investments, our business and prospects may be seriously harmed. In addition, acquisitions may not be as accretive to our revenue or other operating results as expected. To successfully complete an acquisition, we must properly evaluate the business, technology, market and management team of the acquisition target, accurately forecast the financial impact of the transaction, including accounting charges and transaction expenses, integrate and retain personnel, combine potentially different corporate cultures and effectively integrate products, research and development, sales, marketing and support operations. If we fail to do any of these, we may suffer losses and impair relationships with our employees, customers and strategic partners. Additionally, acquisition activities may distract management from day-to-day operations. We also may be unable to maintain consistently uniform standards, controls, procedures and policies across our entire business as a result, and significant additional demands may be placed on our management and our operations, information services and financial, legal and marketing resources. Finally, acquired businesses may result in unexpected liabilities and contingencies, which may involve compliance with foreign laws, payment of taxes, labor negotiations or other unknown costs and expenses, which could be significant.

Changing growth strategies, negative business conditions, changes in useful lives, and other factors may negatively affect the carrying value of the intangible assets and goodwill we have acquired.

We evaluate goodwill and intangible assets for impairment on an annual basis or more frequently when an event occurs, or circumstances change that indicate that the carrying value may not be recoverable. Reductions in operating cash flows or projected cash flows of our reporting units could result in an impairment charge that would negatively impact our operating results. For example, we performed our annual goodwill assessment for 2018 in the fourth quarter of 2018 and determined that the carrying value of goodwill was impaired. As a result, an impairment charge of $3.7 million was recorded. Further, business conditions and other factors may also require us to reassess the useful lives associated with intangible assets.

Risks Related to Technology

Our software or hardware products or the third-party hardware or software integrated with our products or delivered as part of our service offerings may suffer from defects or errors that could impair our ability to sell our products and services.

Software and hardware components as complex as those needed for dedicated purpose intelligent systems frequently contain errors or defects, especially when first introduced or when new versions are released. We have had to delay commercial release of certain versions of our products until problems were corrected and, in some cases, have provided product enhancements to correct errors in released products. Some of our contracts require us to repair or replace products that fail to work. To the extent that we repair or replace products, our expenses may increase. In addition, it is possible that by the time defects are fixed, the market opportunity may decline which may result in lost revenue. Moreover, to the extent that we provide increasingly complex and comprehensive products and services, particularly those focused on IoT hardware, and rely on third-party manufacturers and suppliers to manufacture these products, we will be dependent on the ability of such third-party manufacturers and suppliers to correct, identify and prevent manufacturing errors or defects. Errors or defects that are discovered after commercial release could result in loss of revenue or delay in market acceptance, diversion of development resources, damage to our reputation and increased service and warranty costs, all of which could negatively impact our business and operating results.

Our business and operations would be adversely impacted in the event of a failure or interruption of our IT infrastructure.

The proper functioning of our own IT infrastructure is critical to the efficient operation and management of our business. Our IT is vulnerable to cyberattacks, computer viruses, worms and other malicious software programs, physical and electronic break-ins, sabotage and similar disruptions from unauthorized tampering with our computer systems. We believe that we have adopted appropriate measures to mitigate potential risks to our technology infrastructure and our operations from these IT-related and other potential disruptions. However, given the unpredictability of the timing, nature and scope of such disruptions, we could potentially be subject to downtimes, operational delays, other detrimental impacts on our operations or ability to provide products and services to our customers, the compromising of confidential or personal information, destruction or corruption of data, security breaches, other manipulation or improper use of our systems and networks, financial losses from remedial actions, loss of business or potential liability, and/or damage to our reputation, any of which could have a material adverse effect on our cash flows, competitive position, financial condition or results of operations.

Interruptions or delays in services from third-party data center hosting facilities or cloud computing platform providers could impair the delivery and availability of our products and services and harm our business.

We currently serve certain customers through third-party data center hosting facilities and cloud computing platform providers located in the United States and other countries. Any damage to, or failure of, these systems generally could result in interruptions in the availability of our products and services. We have from time to time experienced, and may continue to experience, such interruptions, which could cause us to issue credits or pay penalties, cause customers to terminate their subscriptions, and adversely affect our customer attrition rates and our ability to attract new customers, all of which would reduce our revenue. Our business would also be harmed if our customers and potential customers believe our product and services offerings are unreliable. Despite contract provisions to protect us, customers may look to us to support and provide warranties for these third-party systems, which may expose us to potential claims, liabilities and obligations for technology or services we did not develop or sell, all of which could harm our business. Further, third-party software and cloud platforms that we currently or may in the future utilize may not continue to be available at reasonable prices, on commercially reasonable terms, or may become unavailable. Any of these outcomes could significantly increase our expenses and result in delays in the provisioning of our products and services until we are able to procure alternative solutions, either by developing equivalent technology or, if available, obtaining such technology through purchase or license from other third parties.

We do not control the operation or security of any of these hosting facilities or cloud computing platforms, and they may be vulnerable to damage or interruption from earthquakes, floods, fires, power loss, telecommunications failures and similar events. They may also be subject to break-ins, sabotage, intentional acts of vandalism and similar misconduct, as well as local administrative actions, changes to legal or permitting requirements and litigation to stop, limit or delay operation. Despite precautions taken by providers of these facilities and platforms, the occurrence of a natural disaster or an act of terrorism, a decision to close the facilities or platforms without adequate notice or other unanticipated problems at these facilities or platforms could result in lengthy interruptions in or cessation of our services.

Breaches in data security or incidents of cybercrime could damage our customers' business and our reputation, which may harm our ability to gain new customers or cause our existing customer to look to our competitors for products and services.

Our products and services involve the storage and transmission of customers' proprietary data and personal information, and security breaches could result in a risk of loss of this data or information, litigation and possible liability. While we have security measures in place, they may be breached as a result of third-party action, including intentional misconduct by computer hackers, employee error, malfeasance or otherwise and result in someone obtaining unauthorized access to our IT systems, our customers' data or our data, including our intellectual property and other confidential business information. Additionally, third parties may attempt to fraudulently induce employees or customers into disclosing sensitive personal information such as usernames, passwords or other information in order to gain access to our customers' data, our data or our IT systems. Because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. In addition, our customers may authorize third-party technology providers to access their customer data, and some of our customers may not have adequate security measures in place to protect their data. Because we do not control the IT security of our customers or third-party technology providers, or of the processing of such data by third-party technology providers, we cannot ensure the integrity or security of such transmissions or processing. Malicious third parties may also conduct attacks designed to temporarily deny customers access to our products and services. Any security breach could result in a loss of confidence in the security of our products and services, damage our reputation, negatively impact our future sales, disrupt our business and lead to legal liability.

Privacy concerns and laws, evolving regulation of cloud computing, cross-border data transfer restrictions and other domestic or foreign regulations may limit the use and adoption of our products and services and adversely affect our business.

Regulation related to the provision of services on the internet is evolving and increasing, as federal, state and foreign governments continue to adopt new laws and regulations addressing data privacy and the collection, processing, storage and use of personal information, such as the E.U.'s Data Protection Directive and General Data Protection Regulation ("GDPR") and the California Consumer Privacy Act ("CCPA"). Further, laws and regulations are increasingly aimed at the use of personal information for marketing purposes, such as the E.U.'s ePrivacy Directive and ePrivacy Regulation. Country-specific laws and regulations are subject to new and differing interpretations and may be inconsistent among jurisdictions. Existing laws and regulations, as well as future requirements, could reduce demand for our products and services or restrict our ability to store and process data or, in some cases, impact our ability to offer our products and services in certain locations or our customers' ability to deploy our solutions globally. The costs of compliance with and other burdens imposed by laws, regulations and standards such as GDPR and CCPA may also limit the use and adoption of our products and services, reduce overall demand for our products and services, lead to significant fines, penalties or liabilities for noncompliance, or slow the pace at which we close sales transactions, any of which could harm our business. Furthermore, concerns regarding data privacy may cause our customers' customers to resist providing the data necessary to allow our customers to use our products and services effectively. Even the perception that the privacy of personal information is not satisfactorily protected or does not meet regulatory requirements could inhibit sales of our products and services and could limit adoption of our cloud-based solutions.

Risks Related to Our Partnership with Microsoft

Because we provide software and services to customers building devices utilizing Microsoft's Windows IoT and Windows Mobile operating systems, as well as the fact that a significant portion of our revenue is derived from the sale of Microsoft Windows IoT and Windows Mobile operating systems, Microsoft has a significant direct and indirect influence on our business. The following Microsoft-related risks may negatively impact our business and operating results.

If we do not maintain our distribution relationship with Microsoft, our revenue would decrease, and our business would be adversely affected.

Effective March 1, 2019, pursuant to a Global Partnership Agreement with Microsoft, we are authorized to sell Windows IoT operating systems in Canada, the United States, Argentina, Brazil, Chile, Mexico, Peru, Venezuela, Puerto Rico, Columbia, and several Caribbean countries. Of our total revenue, 79% in 2019 and 75% in 2018 resulted from the sale of Windows IoT operating systems. Our existing distribution agreement for sales of Windows IoT operating systems in the European Union ("E.U."), the European Free Trade Association, Turkey and Africa, expired on June 30, 2019 and was not renewed thereafter. We generated approximately 3% of our Partner Solutions software sales under this agreement in 2019.

We have also entered into OEM distributor agreements ("ODAs") with Microsoft pursuant to which we are licensed to sell Microsoft Windows Mobile operating systems to customers in North America, South America, Central America (excluding Cuba), Japan, Taiwan, Europe, the Middle East, and Africa. The ODAs to sell Windows Mobile operating systems are effective through April 30, 2022.

We generated $49.8 million and $59.5 million of revenue in 2019 and 2018, respectively, through our sales of Microsoft operating systems and expect this revenue stream to continue, although potentially at a declining rate. If the new GPA or any of our other ODAs are terminated by Microsoft (which Microsoft can do unilaterally) or not renewed, third-party software revenue and resulting gross profit could decrease significantly and our operating results would be negatively impacted. Future renewals by Microsoft, if any, could be on less favorable terms, which could also negatively impact our business and operating results.

Microsoft can change its product pricing at any time, and unless we are able to pass through price increases to our customers, our revenue, gross profit and operating results would be negatively impacted. Further, Microsoft currently offers a rebate program in conjunction with our resale activities in which we earn money for achieving certain predefined objectives. If Microsoft changes the way that rebates are earned by eliminating or negatively modifying the rebate program, our gross profit and operating results would be adversely impacted. We qualified for rebate credits from Microsoft of $2.4 million and $1.7 million in 2019 and 2018, respectively, of which 20% and 30%, respectively, was credited against product invoices and accounted for as a reduction in cost of sales, with the remaining portion as a reduction in marketing expense if and when qualified expenditures are made and claimed.

In January 2019, Microsoft changed the way a portion of its earned rebate may be claimed. The process previously in place under its 2018 program for claiming 30% of the rebates against product invoices was changed; these earned rebate amounts are now credited to the Microsoft Azure Sponsorship program and claimed upon delivery of approved Azure programs. We joined this sponsorship program in January 2019; if we are unable to complete enough qualified Azure programs during each qualification period, we may not be able to claim all or a portion of this rebate.

Our business and results of operations could be negatively impacted by changes Microsoft implements in its pricing of its operating systems.

Microsoft implemented significant pricing changes for its operating systems products, including ending its design registration pricing discounts, terminating its OEM Volume Royalty Program and changing the aggregate volume price structure and product royalties for existing Windows IoT products effective January 1, 2016, and Microsoft could make further pricing changes in the future. These changes have altered the competitive dynamics because the same pricing discounts are available to all distributors of these Microsoft products. As a distributor of Microsoft products, this may impact both the sales prices we charge our customers and the cost of goods sold we incur for many of the Microsoft products we sell. The amount and impact of these changes to our revenue and gross profit are not determinable; however, they may negatively impact our operating results in future reporting periods. The sale of Microsoft operating systems represented approximately 84% and 81% of our total revenue and approximately 70% and 57% of our total gross margin for the years ended December 31, 2019 and 2018, respectively.

In recent years, the markets for Windows IoT and Windows Mobile operating systems have declined; if the markets for these operating systems continue to decline or decline more rapidly than anticipated, our business and operating results would be materially harmed.

A significant portion of our revenue to date has been generated by software and services targeted at customers and devices running various Microsoft Windows IoT and Windows Mobile operating systems. In recent years, the markets for these systems have declined. If the markets for these operating systems continue to decline or decline more rapidly than anticipated, our business and operating results would be negatively impacted. Continued market acceptance of Microsoft Windows IoT and Windows Mobile operating systems will depend on many factors, including:

- Microsoft's development and support of various Windows IoT and Windows Mobile markets. As the developer and primary promoter of Windows IoT and Windows Mobile operating systems, if Microsoft were to decide to discontinue or lessen its support of these operating systems, potential customers could select competing operating systems, which could reduce the demand for our Microsoft Windows IoT and Windows Mobile software products and engineering services, from which a significant portion of our revenue continues to be generated;
- The ability of the Microsoft Windows IoT and Windows Mobile operating systems to compete against existing and emerging operating systems for the smart connected systems market, including iOS from Apple, Inc.; VxWorks and Linux from WindRiver Systems Inc.; Android from Google Inc.; QNX from BlackBerry Limited; and other proprietary operating systems. Microsoft Windows IoT and Windows Mobile operating systems may be unsuccessful in capturing or retaining a significant share of the smart connected systems market in the future;
- The acceptance by customers of the mix of features and functions offered by Microsoft Windows IoT and Windows Mobile operating systems; and

The willingness of software developers to continue to develop and expand the applications running on Microsoft Windows IoT and Windows Mobile operating systems. To the extent that software developers write applications for competing operating systems that are more attractive to users than those available on Microsoft Windows IoT and Windows Mobile operating systems, this could cause potential customers to select competing operating systems.

Our business and results of operations would be adversely impacted if Microsoft decided to provide Windows IoT or Windows Mobile operating systems free of charge to customers.

Microsoft offers certain consumer Windows phone and tablet-based operating systems to customers free of charge, subject to certain limitations. While we do not distribute these operating systems today under our ODAs with Microsoft, if Microsoft were to offer, free of charge, operating systems that we do distribute, our business and results of operations would be adversely impacted.

Microsoft has audited our records under the ODAs in the past and may audit our records again in the future, and any negative audit results could result in additional charges and/or the termination of our distributor relationship with Microsoft.

There are provisions in the ODAs that require us to maintain certain internal records and processes for auditing purposes. Non-compliance with these or other contractual requirements could result in the termination of our distributor relationship with Microsoft. Microsoft concluded audits of our records pertaining to the ODAs in 2009 and 2006, neither of which had material findings. It is possible that future audits could result in charges due to any material findings that are found. We may also be contractually liable for payment of royalties to Microsoft in the event that certificates of authenticity are lost, damaged or stolen.

Risks Related to Operating Internationally

Our international operations expose us to greater intellectual property, management, collections, regulatory and other risks.

Customers outside of North America generated 15% and 6% of our total revenue in 2019 and 2018, respectively. We currently have sizable operations outside of North America and in the United Kingdom (“U.K.”). Our international activities and operations expose us to a number of risks, including the following:

- Greater difficulty in protecting intellectual property due to less stringent foreign intellectual property laws and enforcement policies;
- Longer collection cycles than we typically experience in North America;
- Unfavorable changes in regulatory practices and tariffs;
- Compliance with complex regulatory regimes or restrictions on import and export of our goods and services;
- Complex and/or adverse tax laws and/or changes thereto. Additionally, we may be subject to income, withholding and other taxes for which we may realize no current benefit despite the existence of significant net operating loss and tax credit carryforwards in the U.S.;
- Loss or reduction of withholding tax exemptions;
- The impact of fluctuating exchange rates between the U.S. dollar and foreign currencies;
- General economic and political conditions in international markets which may differ from those in the U.S.;
- Increased exposure to potential liability under the Foreign Corrupt Practices Act;
- Added cost and administrative burden associated with creating and operating business structures in other jurisdictions;
- Potential labor costs and risks associated with employees and labor laws in other geographies; and
- The inherent risks of working in a certain highly regulated and/or controlled economies where relationships between company management and government officials is critical to timely processing of approvals required to conduct business.
- On January 31, 2020, the U.K. exited the E.U., commonly referred to as “Brexit”. As the long-term implications of Brexit become clear, it is possible that there will be greater restrictions on imports and exports between the U.K. and E.U. countries and increased regulatory complexities, which could adversely impact our operations and business in both the U.K. and the E.U.

These risks could have a material adverse effect on the financial and managerial resources required to operate our foreign offices, as well as on our future international revenue, which could negatively impact our business and operating results.

As our customers seek more cost-effective locations to develop and manufacture their products, particularly overseas locations, our ability to continue to sell our software products and services to these customers could be adversely affected, which could negatively impact our revenue and operating results.

Due to competitive and other pressures, some of our customers have moved, and others may seek to move, the development and manufacturing of their smart, connected systems to overseas locations, which may limit our ability to sell our software and services to these customers. As an example, under our ODAs with Microsoft, we are currently only able to sell Microsoft Windows IoT operating systems to our customers in the United States, Canada, the Caribbean (excluding Cuba), Mexico, and the European Free Trade Association. If our customers, or potential customers, move their manufacturing overseas to locations in which our business may be limited, we may be less able to remain competitive, which could negatively impact our revenue and operating results.

Risks Related to Intellectual Property

Our software and service offerings could infringe the intellectual property rights of third parties, which could expose us to additional costs and litigation and could adversely affect our ability to sell our products and services or cause shipment delays or stoppages.

It is difficult to determine whether our software products and engineering services infringe third-party intellectual property rights, particularly in a rapidly evolving technological environment in which technologies often overlap and where there may be numerous patent applications pending, many of which are confidential when filed. If we were to discover that one of our software products or service offerings, or a product based on one of our reference designs, violated a third party's proprietary rights, we may not be able to obtain a license on commercially reasonable terms, or at all, to continue offering that product or service. Similarly, third parties may claim that our software products and services infringe their proprietary rights, regardless of whether such claims have merit. Any such claims could increase our costs and negatively impact our business and operating results. In certain cases, we have been unable to obtain indemnification against claims that third-party technology incorporated into our software products and services infringe the proprietary rights of others. However, any indemnification we do obtain may be limited in scope or amount. Even if we receive broad third-party indemnification, these entities may not have the financial capability to indemnify us in the event of infringement.

In addition, in some circumstances we are required to indemnify our customers for claims made against them that are based on our software products or services. We may face claims of infringement or invalidity related to the software products and services we provide or arising from the incorporation by us of third-party technology and claims for indemnification from our customers resulting from such claims. Some of our competitors have, or are affiliated with companies with, substantially greater resources than we have, and these competitors may be able to sustain the costs of complex intellectual property litigation to a greater degree and for longer periods of time than we could. In addition, we expect that software developers will be increasingly subject to infringement claims as the number of products and competitors in the software industry grows, and as the functionality of products in different industry segments increasingly overlap. Such claims, even if not meritorious, could result in the expenditure of significant financial and managerial resources in addition to potential product redevelopment costs and delays. Furthermore, if we were unsuccessful in resolving a patent or other intellectual property infringement action claim against us, we may be prohibited from developing or commercializing certain of our technologies and products, or delivering services based on the infringing technology, unless we obtain a license from the holder of the patent or other intellectual property rights. We may not be able to obtain any such license on commercially favorable terms, or at all. If such license were not obtained, we would be required to cease these related business operations, which could negatively impact our business, revenue and operating results.

If we are unable to license key software from third parties, our business could be harmed.

We sometimes integrate third-party software with our proprietary software and engineering service offerings or sell such third-party software offerings on a standalone basis, such as we do with Microsoft Windows IoT and Mobile operating systems under our ODAs with Microsoft. If our relationships with these third-party software vendors were to deteriorate, or be eliminated in their entirety, we might be unable to obtain licenses on commercially reasonable terms, if at all. In the event that we are unable to obtain these third-party software offerings, we would be unable to continue to generate revenue from our reseller relationships or, with respect to our proprietary software and engineering services offerings, we would be required to develop this technology internally, assuming it was economically or technically feasible, or seek similar software offerings from other third parties assuming there were competing offerings in the marketplace, which could delay or limit our ability to introduce enhancements or new products, or to continue to sell existing products and engineering services, thereby negatively impacting our revenue and operating results.

If we fail to adequately protect our intellectual property rights, competitors may be able to use our technology or trademarks, which could weaken our competitive position, reduce our revenue and increase our costs.

If we fail to adequately protect our intellectual property, our competitive position could be weakened, and our revenue and operating results adversely affected. We rely primarily on confidentiality policies and procedures and contractual provisions as well as a combination of patent, copyright, trade secret and trademark laws, to protect our intellectual property. These laws, policies and procedures provide only limited protection. It is possible that another party could obtain patents that block our use of some, or all, of our software products and services. If that occurred, we would need to obtain a license from the patent holder or design around those patents. The patent holder may or may not choose to make a license available to us on acceptable terms, or at all. Similarly, it may not be possible to design around a blocking patent. Our efforts to protect our intellectual property rights through patent, copyright, trade secret and trademark laws may not be effective to prevent misappropriation of our technology, or to prevent the development and design by others of products or technologies similar to or competitive with those developed by us.

We license our computer source code to customers. Customers with access to our source code may not comply with the license terms. We may not discover any violations of the license terms and, in the event of discovery of violations, we may not be able to successfully enforce the license terms or recover the economic value lost from such violations. To license some of our software products, we rely in part on “shrink-wrap” and “click wrap” licenses that are not signed by the end user and, therefore, may be unenforceable under the laws of certain jurisdictions. As with other software, our software products are susceptible to unauthorized copying and uses that may go undetected, and policing such unauthorized use is difficult.

A significant portion of our marks include the word “BSQUARE.” Other companies use forms of “BSQUARE” in their marks alone, or in combination with other words, and we cannot prevent all such third-party uses. We license certain trademark rights to third parties. Such licensees may not abide by our compliance and quality control guidelines with respect to such trademark rights. Any of these outcomes could negatively impact our brand, dilute its recognition in the marketplace, or confuse potential customers, all of which could harm our business.

The computer software market is characterized by frequent and substantial intellectual property litigation, which is often complex and expensive, and involves a significant diversion of resources and uncertainty of outcome. Litigation may be necessary in the future to enforce our intellectual property or to defend against a claim of infringement or invalidity. Litigation could result in substantial costs and the diversion of resources and could negatively impact our business and operating results.

Risks Related to Taxes

We could become subject to taxation in jurisdictions in which we do not believe we currently have tax nexus, which could expose us to additional tax liability that we have not been subject to in the past.

We make sales in many jurisdictions across the United States. We believe we do not have nexus in most of these jurisdictions and, therefore, we believe we are not subject to sales, franchise, income and other state and local taxes in such jurisdictions. However, if we are determined to have tax nexus in other jurisdictions (as a result of more aggressive interpretations of nexus by taxing jurisdictions or otherwise) and we are unable to pass through this cost to our customers, our tax expense will increase which will negatively affect our results of operations. Further, because state and local tax laws are becoming increasingly complex, we anticipate that our cost to monitor our state and local tax compliance will increase which will negatively affect our results of operations. Additionally, we may have unknown tax exposure in a state or local tax jurisdiction because of recent tax law changes of which we are unaware, and the resulting liability could be significant and would negatively affect our results of operations.

Changes in our effective tax rate may impact our results of operations.

We are subject to taxes in the U.S. and other jurisdictions. Tax rates in these jurisdictions may be subject to significant change due to economic and/or political conditions. A number of other factors may also impact our future effective tax rate including:

- the jurisdictions in which profits are determined to be earned and taxed;
- the resolution of issues arising from tax audits with various tax authorities;
- changes in valuation of our deferred tax assets and liabilities;
- increases in expenses not deductible for tax purposes, including write-offs of acquired intangibles and impairment of goodwill in connection with acquisitions;
- changes in availability of tax credits, tax holidays, and tax deductions;
- changes in share-based compensation; and
- changes in tax laws or the interpretation of such tax laws and changes in generally accepted accounting principles.

There may be restrictions on the use of our net operating loss and tax credit carryforwards due to a tax law “ownership change.”

We did not generate taxable income in 2019 or 2018 and, as a result, we were unable to use our net operating loss and tax credit carryforwards with respect to such tax years. In addition, Sections 382 and 383 of the Internal Revenue Code restrict the ability of a corporation that undergoes an ownership change to use net operating loss and tax credit carryforwards. At December 31, 2019, we had approximately $79.7 million of federal and $12.4 million of state net operating loss carryforwards and $3.6 million of tax credit carryforwards. Of the federal net operating loss carryforwards, an aggregate of $45.7 million will expire by 2024 and we may not generate sufficient taxable income prior to such time in order to fully utilize our net operating loss and tax credit carryforwards before they expire. Moreover, under the applicable tax rules, an ownership change occurs if greater than five percent shareholders of an issuer's outstanding common stock collectively increase their ownership percentage by more than 50 percentage points over a rolling three-year period. As of December 31, 2017, we performed analyses of possible ownership changes which included consideration of a third-party study, and do not believe that an ownership change, as defined by Section 382, has occurred. However, if a tax law ownership change has occurred of which we are not aware, or if a tax law ownership change occurs in the future, we may have to adjust the valuation of our deferred tax assets and could be at risk of having to pay income taxes notwithstanding the existence of our sizable carryforwards. Further, to the extent that we have utilized our carryforwards from prior years, the existence of a previous tax law ownership change that we did not account for could result in liability for back taxes, interest, and penalties. If we are unable to utilize our carryforwards and/or if we previously utilized carryforwards to which we were not entitled, it would negatively impact our business, financial condition and operating results.

Risks Related to Governance

It might be difficult for a third party to acquire us even if doing so would be beneficial to our shareholders.

Certain provisions of our articles of incorporation, bylaws and Washington law may discourage, delay or prevent a change in the control of us or a change in our management, even if doing so would be beneficial to our shareholders. Our Board of Directors has the authority under our articles of incorporation to issue preferred stock with rights superior to the rights of the holders of common stock. As a result, preferred stock could be issued quickly and easily with terms calculated to delay or prevent a change in control of our company or make removal of our management more difficult. In addition, our Board of Directors is divided into three classes. The directors in each class serve for three-year terms, one class being elected each year by our shareholders. This system of electing and removing directors may discourage a third party from making a tender offer or otherwise attempting to obtain control of our company because it generally makes it more difficult for shareholders to replace a majority of our directors. In addition, Chapter 19 of the Washington Business Corporation Act generally prohibits a "target corporation" from engaging in certain significant business transactions with a defined "acquiring person" for a period of five years after the acquisition, unless the transaction or acquisition of shares is approved by a majority of the members of the target corporation's Board of Directors prior to the time of acquisition. This provision may have the effect of delaying, deterring or preventing a change in control of our company. The existence of these anti-takeover provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock.

Item 1B. *Unresolved Staff Comments.*

None.

Item 2. *Properties.*

As of December 31, 2019, our corporate headquarters had 24,061 square feet of leased space in a single location in Bellevue, Washington. The lease term ends in May 2020. We have entered into a lease agreement for corporate headquarters in Seattle, Washington and expect to move in prior to the end of our current lease.

We lease office space overseas in Trowbridge, England, U.K. In the fourth quarter of 2019, we made the decision to close our office in Taipei, Taiwan.

We believe that our facilities meet our current operational needs now and in the near-term future.

Item 3. *Legal Proceedings.*

None.

Item 4. *Mine Safety Disclosures.*

Not applicable.

PART II

Item 5. ***Market for Registrant's Common Equity Related Stockholder Matters and Issuer Purchases of Equity Securities.***

Market Information

Our common stock is traded on The NASDAQ Stock Market, LLC under the symbol "BSQR."

Holders

As of January 31, 2020, there were 112 holders of record of our common stock. Because many shares of our common stock are held by brokers and other institutions on behalf of shareholders, we are unable to determine the total number of shareholders represented by these holders of record.

Item 6. ***Selected Financial Data.***

Not applicable.

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations.*

The following Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our consolidated financial statements and related notes. This Management's Discussion and Analysis of Financial Condition and Results of Operations may contain some statements and information that are not historical facts but are forward-looking statements. For a discussion of these forward-looking statements, and of important factors that could cause results to differ materially from the forward-looking statements contained in this report, see Item 1 of Part I, "Business—Cautionary Note Regarding Forward-Looking Statements," and Item 1A of Part I, "Risk Factors."

Overview

Bsquare builds technology that is powering the next generation of intelligent systems. We help companies realize the promise of IoT through the development of devices and systems that are cloud-enabled, share data seamlessly, facilitate distributed learning and control, and operate securely at scale. We believe that IoT-enabled systems can not only deliver value to our customers, but also can help people make better use of the resources of our planet and work more effectively to improve quality of life. Bsquare's suite of services and software components create for our customers new revenue streams and operating models while providing opportunities for lowering costs and improving operations.

2019 was a year of transition for Bsquare. In March 2019, Ralph C. Derrickson joined as our President and Chief Executive Officer. Upon his arrival we initiated an assessment of our product and service offering including DataV, our Industrial Internet of Things (IIoT) software platform and associated business model, the market landscape, our experience with IoT and device customers, our historical software distribution business and our leadership team. In May 2019 we announced a series of business rebuilding initiatives called "One Bsquare" that included:

- revising our go to market strategy;
- strengthening our strategic partnerships;
- offering customers an edge-to-cloud product and service suite;
- retooling sales and marketing; and
- focusing on operating excellence.

We also announced that we would be reducing headcount in our Bellevue location, reorganizing and eliminating positions on our senior leadership team, and no longer marketing DataV as a platform and that it would be replaced by suite of software components harvested from DataV.

We called this suite of software and services Bsquare IQ (or "B2IQ").

The software components of the B2IQ suite were harvested from our prior DataV efforts and were substantially re-tooled to exploit the capabilities of cloud services that weren't available when DataV was first conceived. We observed that customers who were buying OS software for their devices were now contemplating their approach to IoT and it was logical for them to consider Bsquare as a software partner. Our B2IQ software and B2IQ OS utilities allowed us to capitalize on our relationships and long history with OS software. Further, where DataV was contemplated as a "one-size-fits-all" platform, our B2IQ software strategy recognized that the requirements for IoT vary widely and we could create more opportunities to win consulting contracts for custom IoT solutions if we switched to a "building blocks" approach to IoT. We expect these components will be licensed on a per-device basis when deployed as part of a customer-specific solution.

In addition to the system design and software engineering services included in the B2IQ suite, we have expanded our services to include 24/7 support, dev/ops, and cloud management – the services that are critical when a customer puts an edge-to-cloud solution into production. Experience with our early IoT customers showed that Bsquare's role could last well beyond the design and development phase and continue into their on-going operations. This role as an operating partner for our customers represents an opportunity for future collaboration and on-going business in the form of monthly support and services fees to Bsquare.

During the transition of our product strategy we were in close communication with our DataV customers to ensure we were meeting our operating commitments while re-tooling our software. At the end of 2019 we were in active discussions to revise the commercial terms of our relationships to match our B2IQ software and professional services approach.

In September 2019 we relaunched our sales and marketing with new branding, messaging, Bsquare website and full suite of products. The new website emphasized our full offering including software from our partners (Microsoft, Adobe, and MacAfee), our B2IQ software and our suite of software development and operating services. Prior versions of our website focused almost exclusively on DataV with little emphasis on our other products and services, which we believe contributed to the erosion of their related revenue.

We invested heavily in our longstanding partnership with Microsoft and reaffirmed our new partnership with AWS. Our move away from DataV paved the way for collaboration at the cloud that was not possible with our DataV platform product strategy. We added new partnerships with Synnex and Arrow that allow us to offer Azure CSP products and services. We also expanded our collaboration with Microsoft to include its Sphere product.

Coinciding with the announcement of our Q3 2019 results, we announced a change in the way we manage and report about our business. The Partner Solutions business segment, formerly Third-Party Software, generates revenue from the re-sale of partners' software and the consulting services we provide to support them. The Edge to Cloud business segment, formerly and separately reported as Professional Engineering Services and Proprietary Software, generates revenue from the sale and delivery of professional services as well as licensed proprietary software components. We also announced that we were closing our Taiwan offices effective at the end of 2019.

During the year we made a number of changes to our leadership team, Mary Haggard joined in May as VP of Strategic Partnerships, Chris Wheaton joined as CFO and Steven Gottlieb joined as VP of Marketing. In November 2019 we promoted Matthew Inglis to VP of Engineering and John Luethe to VP of Product Management. Also, in November 2019, we announced that we would be adopting the ISO-compliant engineering and project management processes developed in our UK operation.

By year end our results showed that the One Bsquare Initiatives were working and our concerted focus on operational excellence was having a sustained impact. The fourth quarter of 2019 saw our third sequential quarter of continued improvement in the business. Revenue was up in the Partner Solutions segment, margins were steady as a result of continued strength in the Edge to Cloud segment, and operating losses, net of restructuring were at their lowest levels since the fourth quarter of 2016. While we have not yet returned to profitability, we have stabilized the business and are reversing the trends. We are actively setting a foundation that will allow Bsquare to more readily take advantage of growth opportunities as they become apparent.

Critical Accounting Judgments

Revenue recognition

We recognize revenue when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration that we expect to receive in exchange for those goods or services. We generate all of our revenue from contracts with customers.

Embedded operating system software

We sell embedded operating system software licenses based upon a customer purchase order, shipping a certificate of authenticity ("COA") to satisfy this single performance obligation. These shipments are also subject to limited return rights; historically, returns have averaged less than one-quarter of one percent. We recognize revenue from third-party products at the time of shipment when the customer accepts control of the COA.

Proprietary software

We sell our proprietary software products to customers under a contract or by purchase order. Our Edge to Cloud software contracts generally include professional services, a perpetual or term license and support and maintenance. In contracts with multiple performance obligations, we identify each performance obligation and evaluate whether the performance obligations are distinct within the context of the contract at contract inception. Performance obligations that are not distinct at contract inception are combined. Contracts that include software customization may result in the combination of the customization services with the software license as one distinct performance obligation. The transaction price is generally in the form of a fixed fee at contract inception. Certain Edge to Cloud contracts also include variable consideration in the form of royalties earned when customers meet contractual volume thresholds. We allocate the transaction price to each distinct performance obligation based on the estimated standalone selling price for each performance obligation. We then look to how control of the software transfers to the customer in order to determine the timing of revenue recognition. In contracts that include customer acceptance, we recognize revenue when we have delivered the software and received customer acceptance. We recognize revenue from support and maintenance over the service delivery period. We recognize revenue from royalties in the period of usage.

Our software products generally do not include customization or modification services and are sold in the form of term licenses. These software licenses represent one distinct performance obligation. Revenue is recognized when the software is delivered to the customer.

Professional services

We enter into contracts for professional services, including for our IoT-related service offerings, that include software development and customization. We identify each performance obligation in our professional services contracts at contract inception. The contracts generally include project deliverables specified by each customer. The performance obligations in the contracts are generally combined into one deliverable. The contract pricing is either at stated billing rates per service hour and material costs or at a fixed amount. Services provided under professional engineering contracts generally result in the transfer of control of the applicable deliverable over time. We recognize revenue on service contracts based on time and materials as we have the right to invoice. We recognize revenue on fixed fee contracts on the proportion of labor hours expended to the total hours expected to complete the contract performance obligation. Certain professional service contracts include substantive customer acceptance provisions, in which case, we recognize revenue upon customer acceptance.

The determination of the total labor hours expected to complete the performance obligations on fixed fee contracts involves significant judgment. We incorporate revisions to hour and cost estimates when the causal facts become known. In certain situations, when it is impractical for us to reasonably measure the outcome of a performance obligation, and where we anticipate that we will not incur a loss, an adjusted cost-based input method is used for revenue recognition. Equal amounts of revenue and cost are recognized during the contract period, and profit is recognized when the project is completed and accepted.

We measure our estimate of completion on fixed-price contracts, which in turn determines the amount of revenue we recognize, based primarily on actual hours incurred to date and our estimate of remaining hours necessary to complete the contract. These estimates factor in such variables as the remaining tasks, the complexity of the tasks, the contracted quality of the software to be provided, the customer’s estimated delivery date, integration of third-party software and quality thereof and other factors. Every fixed-price contract requires various approvals within our company, including by our Chief Executive Officer if significant. This approval process takes into consideration several factors, including the complexity of engineering required. Historically, our estimation processes related to fixed-price contracts have been accurate based on the information known at the time of the reporting of our results. However, percentage-of-completion estimates require significant judgment. During the year ended December 31, 2019, we delivered professional engineering services under three fixed-price service contracts. The estimated remaining labor hours and costs to complete these contracts represent management’s best estimates based on the facts and circumstances as of the filing of this report. If there are changes to the underlying facts and circumstances, we record the revisions to our calculations in the period the changes are noted.

Leases

We lease office facilities, primarily under operating leases, which expire at various dates through 2027. These leases generally contain renewal options for a defined number of years at the then-fair market rental rate or rate stipulated in the lease agreement; which the Company has an option to exercise at the end of the initial lease term.

We determine if an arrangement is a lease at inception. On our balance sheet, our office facility leases, with a lease term greater than 12-months, are included in Right-of-Use (“ROU”) assets and related lease liabilities are included in the Operating leases and Operating leases, long-term statement line items. ROU assets represent our right to use the underlying assets for the lease term and operating lease liabilities represent our obligation to make lease payments arising from the lease agreements. Operating lease ROU assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the term of the lease. For leases that do not provide an implicit rate, we use an incremental borrowing rate based on information available at the commencement date to determine the present value of lease payments. We will use the implicit rate in the lease when readily determinable. The Company accounts for its lease expense with free rent periods and step-rent provisions on a straight-line basis over the original term of the lease and any extension options that the Company more likely than not expects to exercise, from the date the Company has control of the property. Certain leases provide for periodic rental increases based on price indices. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Intangible assets and goodwill

We evaluate our intangible assets for indications of impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Our intangible assets consist of customer relationships arising from business acquisitions. We periodically assess the value of our intangible assets. Factors that could trigger an impairment analysis include significant under-performance relative to historical or projected future operating results, significant changes in the manner of our use of the acquired assets or the strategy for our overall business or significant negative industry or economic trends. If this evaluation indicates that the value of the intangible asset may be impaired, we assess the likelihood of recoverability of the net carrying value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the technology over the remaining useful life, we reduce the net carrying value of the related intangible asset to fair value.

We evaluate goodwill for impairment annually during the fourth quarter or more frequently when an event occurs, or circumstances change that indicate that the carrying value may not be recoverable. We have three reporting units for the purpose of evaluating goodwill for impairment—third-party software, proprietary software and professional engineering services. See Note. 15, Information about Operating Segments and Geographic Areas in the Notes to our Consolidated Financial Statements in Item 8.

For reporting units that carry goodwill, we test for impairment by performing an optional qualitative assessment to determine whether the fair value of the reporting unit is more likely than not less than the carrying amount. Alternatively, at our option, we can forego performing the qualitative assessment and proceed directly to perform the quantitative impairment test by comparing the fair value of the reporting unit with its carrying amount, including goodwill, and recording a goodwill impairment charge for the excess. Any such impairment charges could be significant and have a material adverse effect on our reported financial results.

Taxes

As part of the process of preparing our consolidated financial statements, we are required to estimate income taxes in each of the countries and other jurisdictions in which we operate. This process involves estimating our current tax expense together with assessing temporary differences resulting from the differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities. Net operating losses and tax credits, to the extent not already utilized to offset taxable income or income taxes, also give rise to deferred tax assets. We must then assess the likelihood that any deferred tax assets will be realized from future taxable income, and, to the extent we believe that recovery is not likely, we must establish a valuation allowance. We are required to use judgment as to the appropriate weighting of all available evidence when assessing the need for the establishment or the release of valuation allowances. As part of this analysis, we examine all available evidence on a jurisdiction-by-jurisdiction basis and weigh the positive and negative information when determining the need for full or partial valuation allowances. The evidence considered for each jurisdiction includes, among other items, (i) the historical levels of income or loss over a range of time periods that extends beyond the two years presented, (ii) the historical sources of income and losses, (iii) the expectations and risk associated with underlying estimates of future taxable income, (iv) the expectations and risk associated with new product offerings and uncertainties with the timing of future taxable income, and (v) prudent and feasible tax planning strategies. Significant judgment is required in determining our provision for income taxes, deferred tax assets and liabilities and any valuation allowance recorded against our deferred tax assets. We estimate the valuation allowance related to our deferred tax assets on a quarterly basis.

Our sales may be subject to other taxes, particularly withholding taxes, due to our sales to customers in countries other than the United States. The tax regulations governing withholding taxes are complex, causing us to have to make assumptions about the appropriate tax treatment. Further, we make sales in many jurisdictions across the United States, where tax regulations are varied and complex. We must therefore continue to analyze our state tax exposure and determine what the appropriate tax treatments are, and make estimates for sales, franchise, income and other state taxes.

Results of Operations

The following table presents our summarized results of operations for the periods indicated. Our historical operating results are not necessarily indicative of the results for any future period.

	Year Ended December 31,			
(In thousands, except percentages)	2019	2018	$ Change	% Change
Revenue	$ 59,283	$ 73,414	$ (14,131)	(19)%
Cost of revenue	49,187	57,904	(8,717)	(15)%
Gross profit	10,096	15,510	(5,414)	(35)%
Operating expenses	19,410	29,441	(10,031)	(34)%
Loss from operations	(9,314)	(13,931)	4,617	(33)%
Other income, net	149	207	(58)	(28)%
Loss before income taxes	(9,165)	(13,724)	4,559	(33)%
Income tax expense	(16)	(13)	(3)	23%
Net loss	$ (9,181)	$ (13,737)	$ 4,556	(33)%

Revenue

We generate revenue from the sale of software, both embedded operating system software that we resell and our own proprietary software, and the sale of professional services. Total revenue decreased in 2019 compared to 2018, primarily due to lower sales of Microsoft Windows IoT and Mobile operating systems and lower Edge to Cloud service revenue, predominantly in North America.

One customer, Honeywell International, Inc., accounted for 10% of total revenue in 2018. No other customers accounted for 10% or more of total revenue in 2019 or 2018.

Additional revenue details were as follows:

	Year Ended December 31,			
(In thousands, except percentages)	2019	2018	$ Change	% Change
Revenue:				
Partner Solutions	$ 50,628	$ 61,159	$ (10,531)	(17)%
Edge to Cloud	8,655	12,255	(3,600)	(29)%
Total revenue	$ 59,283	$ 73,414	$ (14,131)	(19)%
As a percentage of total revenue:				
Partner Solutions	85%	83%		
Edge to Cloud	15%	17%		

Total revenue consists of sales of embedded operating system software and revenue realized from sales of our own proprietary software products, which include software license sales and support and maintenance revenue, and professional services that support DataV software and service customers.

Partner solutions revenue decreased in 2019 compared to 2018, driven primarily by lower sales of Microsoft Windows IoT operating systems. Sales of Microsoft operating systems represented approximately 84% and 81% of our total revenue and 70% and 57% of our total gross profit for 2019 and 2018, respectively.

Edge to Cloud revenue decreased in 2019 compared to 2018, due to declines in service revenue generated in North America, Asia and Europe with the completion in 2018 of several DataV software projects. We expect Edge to Cloud service revenue to grow over time as we focus our strategic focus toward cloud-based and other IoT-related service offerings. We expect Edge to Cloud revenue will continue to vary in timing and amounts.

Gross profit and gross margin Cost of Partner Solutions revenue consists primarily of the cost of embedded operating system software product costs payable to third-party vendors and support costs associated with our proprietary software products. Cost of Edge to Cloud revenue consists primarily of salaries and benefits, contractor costs and re-billable expenses, related facilities and depreciation costs, and amortization of certain intangible assets related to acquisitions.

Gross profit and gross margin were as follows:

	Year Ended December 31,			
(In thousands, except percentages)	2019	2018	$ Change	% Change (1)
Partner Solutions gross profit	$ 7,430	$ 9,751	$ (2,321)	(24)%
Partner Solutions gross margin	15%	16%	-	(1)%
Edge to Cloud gross profit	$ 2,666	$ 5,759	$ (3,093)	(54)%
Edge to Cloud gross margin	31%	47%	-	(16)%
Total gross profit	$ 10,096	$ 15,510	$ (5,414)	(35)%
Total gross margin	17%	21%	-	(4)%

(1) For gross margin, amounts represent percentage point change.

Partner Solutions gross profit declined in 2019 compared to 2018, primarily as a result of lower third-party software sales and from a decrease in the amount of rebate credits we received from Microsoft in the current year period compared to the prior year period, but gross margins were relatively stable. We experienced increased competition with respect to a number of larger Partner Solutions software accounts during 2019 as price protections under the Microsoft volume pricing arrangement, which ended in 2016, reduced per account revenue. Gross profit on Partner Solutions software was positively impacted in 2019 and 2018 by rebate credits we received from Microsoft for the sale of Windows IoT operating systems earned through the achievement of defined objectives. In accordance with Microsoft rebate program rules, we allocate 20% and 30% of rebates in 2019 and 2018, respectively, to reduce cost of revenue, with the remaining 80% in 2019, and 70% in 2018, used to offset qualified marketing expenses in the period the expenditures are incurred. Under the Microsoft rebate program, we recorded $0.3 million and $0.7 million of rebates in 2019 and 2018, respectively, which were accounted for as reductions in cost of revenue. Additionally, we recorded $1.2 million and $0.7 million in rebates in 2019 and 2018 respectively, which were accounted for as reductions in marketing expenses. There was a balance of approximately $1.0 million in outstanding rebates for which we qualified as of December 31, 2019. If qualified program expenditures are subsequently made, these will be accounted for as reductions in marketing expenses in the period in which such expenditures are made.

Edge to Cloud gross profit and gross margin decreased in 2019 compared to 2018, primarily due to decreased sales of DataV software and services in 2019 compared to 2018.

Operating expenses

Operating expenses were as follows:

	Year Ended December 31,			
(In thousands, except percentages)	2019	2018	$ Change	% Change
Operating expenses:				
Selling, general and administrative	$ 11,316	$ 17,074	$ (5,758)	(34)%
Research and development	5,751	8,629	(2,878)	(33)%
Restructuring costs	2,343	-	2,343	100%
Goodwill impairment	-	3,738	(3,738)	(100)%
Total operating expenses	$ 19,410	$ 29,441	$ (10,031)	(34)%
As a percentage of total revenue:				
Selling, general and administrative	19%	23%		
Research and development	10%	12%		
Restructuring costs	4%	0%		
Goodwill impairment	0%	5%		

Selling, general and administrative

Selling, general and administrative ("SG&A") expenses consist primarily of salaries and related benefits, commissions and bonuses for our sales, marketing and administrative personnel and related facilities and depreciation costs, as well as professional services fees (e.g., consulting, legal, audit and tax). SG&A expenses decreased in 2019 compared to 2018, due to lower salaries and related benefits and across the board spending reduction efforts that started in the second half of 2018 and continued during 2019.

Research and development

Research and development ("R&D") expenses consist primarily of salaries and benefits for software development and quality assurance personnel, contractor and consultant costs and related facilities and depreciation costs. R&D expenses decreased in 2019 compared to 2018, primarily due to lower salaries and related benefits resulting from our spending reduction efforts.

Restructuring costs

Restructuring costs include $1.9 million in severance and benefits related to a workforce reduction plan announced by management in the second quarter of 2019 and a non-cash impairment charge in the second quarter of 2019 of $0.4 million related to certain software development cost assets.

Goodwill impairment

Goodwill impairment expense resulted from our annual goodwill assessment in the fourth quarter of 2018, where the carrying value of goodwill was determined to be fully impaired, resulting in an impairment charge of $3.7 million.

Other income and loss

Other income and loss consist primarily of interest income on our cash and investments, gains and losses we may recognize on our investments, gains and losses on foreign exchange transactions and other items. The decrease in 2019 compared to 2018 was primarily due to lower total interest earned on our cash and investments and foreign exchange rate fluctuations.

Income taxes

Income tax expense for 2019 and 2018 related to state and local income taxes.

Liquidity and Capital Resources

As of December 31, 2019, we had $10.6 million of cash, cash equivalents and investments (including $0.6 million in restricted cash), compared to $16.9 million at December 31, 2018, reflecting a net use of approximately $6.4 million in cash, cash equivalents and investments. We generally invest our excess cash in high quality marketable investments. These investments generally include corporate notes and bonds, commercial paper and money market funds, although specific holdings can vary from period to period depending upon our cash requirements. Our investments held at December 31, 2019 had minimal default risk and short-term maturities.

Operating activities used cash of approximately $6.0 million in 2019, which included a net loss of $9.2 million, partially offset by non-cash adjustments of $1.8 million and a change in working capital of approximately $1.4 million. Cash used in operating activities in 2019 included one-time payment of $1.5 million in restructuring costs. Operating activities used cash of approximately $7.4 million in 2018, which included a net loss of approximately $13.7 million, partially offset by non-cash adjustments of approximately $5.1 million and a working capital usage of approximately $1.3 million.

Investing activities provided cash of approximately $3.9 million in 2019, primarily due to net cash inflows on short-term investments of $4.3 million, partially offset by capital expenditures of $0.4 million. Investing activities provided cash of approximately $5.1 million in 2018, primarily due to net cash inflows on short-term investments of $5.5 million, partially offset by capital expenditures of $0.5 million.

Financing activities provided no cash in 2019 and negligible cash in 2018 resulting from the exercise of stock options.

We believe that our existing cash, cash equivalents and investments will be sufficient to meet our needs for working capital and capital expenditures for at least the next 12 months.

Contractual commitments

Future operating lease commitments were as follows as of December 31, 2019 (in thousands):

As of December 31, 2019, maturities of lease liabilities were as follows:	**Operating leases**
Years Ended December 31,	
2020	$ 727
2021	304
2022	249
2023	255
2024	262
Thereafter	709
Total minimum lease payments	2,506
Less: amount representing interest	(548)
Present value of lease liabilities	$ 1,958

Recently Issued Accounting Standards

See Note 1, “Summary of Significant Accounting Policies” in the Notes to Consolidated Financial Statements in Item 8.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk.*

Not applicable.

Item 8. ***Financial Statements and Supplementary Data.***

BSQUARE CORPORATION

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders
BSQUARE Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of BSQUARE Corporation (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive loss, shareholders' equity, and cash flows for the years then ended, and the related notes (collectively referred to as the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2019 and 2018, and the consolidated results of its operations and its cash flows for the years then ended, in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for leases in 2019.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements 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 audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures to 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. We believe that our audits provide a reasonable basis for our opinion.

/s/ Moss Adams LLP

Seattle, Washington

February 24, 2020

We have served as the Company's auditor since 2006.

BSQUARE CORPORATION

CONSOLIDATED BALANCE SHEETS
(In thousands, except share amounts)

	December 31, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 7,712	$ 10,005
Restricted cash	600	263
Short-term investments	2,249	6,409
Accounts receivable, net of allowance for doubtful accounts of $31 at December 31, 2019 and $40 at December 31, 2018	9,216	11,581
Prepaid expenses and other current assets	244	685
Contract assets	494	1,053
Total current assets	20,515	29,996
Restricted cash, long-term	—	263
Equipment, furniture and leasehold improvements, net	252	911
Deferred tax assets	7	7
Intangible assets, net	169	267
Right-of-use lease assets, net	1,828	—
Other non-current assets including contract assets	284	550
Total assets	$ 23,055	$ 31,994
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Third-party software fees payable	$ 7,224	$ 7,620
Accounts payable	408	565
Accrued compensation	1,001	1,629
Other accrued expenses	306	653
Deferred rent, current portion	—	347
Deferred revenue, current portion	1,559	1,652
Operating leases	702	—
Total current liabilities	11,200	12,466
Deferred rent	—	150
Deferred revenue	903	1,037
Operating leases, long-term	1,256	
Commitments and contingencies (Note 10)		
Shareholders' equity:		
Preferred stock, no par: 10,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, no par: 37,500,000 shares authorized; 13,042,293 issued and outstanding at December 31, 2019 and 12,777,573 issued and outstanding at December 31, 2018	138,877	138,280
Accumulated other comprehensive loss	(987)	(926)
Accumulated deficit	(128,194)	(119,013)
Total shareholders' equity	9,696	18,341
Total liabilities and shareholders' equity	$ 23,055	$ 31,994

See notes to consolidated financial statements.

BSQUARE CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In thousands, except per share amounts)

	Year Ended December 31, 2019	Year Ended December 31, 2018
Revenue:		
Partner Solutions	$ 50,628	$ 61,159
Edge to Cloud	8,655	12,255
Total revenue	59,283	73,414
Cost of revenue:		
Partner Solutions	43,198	51,408
Edge to Cloud	5,989	6,496
Total cost of revenue	49,187	57,904
Gross profit	10,096	15,510
Operating expenses:		
Selling, general and administrative	11,316	17,074
Research and development	5,751	8,629
Restructuring costs	2,343	—
Goodwill impairment	—	3,738
Total operating expenses	19,410	29,441
Loss from operations	(9,314)	(13,931)
Other income, net	149	207
Loss before income taxes	(9,165)	(13,724)
Income tax expense	(16)	(13)
Net loss	$ (9,181)	$ (13,737)
Basic loss per share	$ (0.71)	$ (1.08)
Diluted loss per share	$ (0.71)	$ (1.08)
Shares used in per share calculations:		
Basic	12,896	12,712
Diluted	12,896	12,712
Comprehensive loss:		
Net loss	$ (9,181)	$ (13,737)
Other comprehensive loss:		
Foreign currency translation, net of tax	(63)	(17)
Unrealized gain on investments, net of tax	2	7
Total other comprehensive loss	(61)	(10)
Comprehensive loss	$ (9,242)	$ (13,747)

See notes to consolidated financial statements.

BSQUARE CORPORATION

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(In thousands, except share amounts)

	Preferred Stock		Common Stock		Accumulated Other Comprehensive	Accumulated	Total Shareholders'
	Shares	Amount	Shares	Amount	Income (Loss)	Deficit	Equity
Balance as of December 31, 2017	-	$ -	12,664,489	$137,622	$ (916)	$ (105,276)	$ 31,430
Exercise of stock options	-	-	2,422	9	-	-	9
Share-based compensation, including issuance of restricted stock	-	-	113,535	678	-	-	678
Shares of restricted stock withheld for taxes			(2,873)	(10)	-	-	(10)
Net loss	-	-	-	-	-	(13,737)	(13,737)
Foreign currency translation adjustment, net of tax	-	-	-	(19)	(17)	-	(36)
Unrealized gain on investments, net of tax	-	-	-	-	7	-	7
Balance as of December 31, 2018	-	-	12,777,573	138,280	(926)	(119,013)	18,341
Exercise of stock options	-	-	264,720	-	-	-	-
Share-based compensation, including issuance of restricted stock	-	-	-	519	-	-	519
Shares of restricted stock withheld for taxes	-	-	-	(24)	-	-	(24)
Net loss	-	-	-	-	-	(9,181)	(9,181)
Foreign currency translation adjustment, net of tax	-	-	-	102	(63)	-	39
Unrealized gain on investments, net of tax	-	-	-	-	2	-	2
Balance as of December 31, 2019	-	$ -	13,042,293	$138,877	$ (987)	$ (128,194)	$ 9,696

See notes to consolidated financial statements.

BSQUARE CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31, 2019	Year Ended December 31, 2018
Cash flows from operating activities:		
Net loss	$ (9,181)	$ (13,737)
Adjustments to reconcile net loss to net cash from operating activities:		
Depreciation and amortization	897	639
Share-based compensation	519	678
Software development costs impairment	375	-
Goodwill impairment	-	3,738
Changes in operating assets and liabilities:		
Accounts receivable, net	2,365	6,433
Prepaid expenses and other assets	593	(115)
Contract assets	559	(644)
Third-party software fees payable	(396)	(2,927)
Accounts payable and accrued expenses	(1,132)	(475)
Operating leases	130	-
Deferred revenue	(227)	(591)
Deferred rent	(497)	(358)
Net cash used by operating activities	(5,995)	(7,359)
Cash flows from investing activities:		
Purchases of equipment and furniture	(418)	(463)
Proceeds from maturities of short-term investments	12,390	18,125
Purchases of short-term investments	(8,114)	(12,595)
Net cash provided by investing activities	3,858	5,067
Cash flows from financing activities—proceeds from exercise of stock options	-	9
Effect of exchange rates on cash	(82)	(45)
Net decrease in cash, restricted cash, and cash equivalents	(2,219)	(2,328)
Cash, restricted cash, and cash equivalents, beginning of year	10,531	12,859
Cash, restricted cash, and cash equivalents, end of year	$ 8,312	$ 10,531
Supplemental cash flow information:		
Cash (refund of) paid for income taxes	(7)	75

See notes to consolidated financial statements.

BSQUARE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Description of Business and Accounting Policies

Description of business

BSQUARE Corporation (“BSQUARE,” “we,” “us” and “our”) was incorporated in Washington State in July 1994. Since our inception, our business has largely been focused on providing software solutions (including reselling software from Microsoft Corporation (“Microsoft”)) and related engineering services to businesses that develop, market and sell dedicated-purpose standalone intelligent systems. Examples of dedicated-purpose standalone intelligent systems include smart, connected computing devices such as smart phones, set-top boxes, point-of-sale terminals, kiosks, tablets and handheld data collection devices, as well as smart vending machines, ATM machines, digital signs and in-vehicle telematics and entertainment devices.

Bsquare builds technology that is powering the next generation of intelligent systems. We help companies realize the promise of IoT through the development of devices and systems that are cloud-enabled, share data seamlessly, facilitate distributed learning and control, and operate at securely scale. We believe that IoT-enabled systems can not only deliver value to our customers but can also help people make better use of the resources of our planet. Bsquare's suite of services and software components create new revenue streams and operating models for our customers while providing opportunities for lowering costs and improving operations.

Basis of consolidation

The consolidated financial statements include the accounts of BSQUARE and our wholly owned subsidiaries. All intercompany balances and transactions have been eliminated.

Recently adopted accounting standards

We adopted Accounting Standard Update (ASU) No. 2016-02, Leases (ASU 2016-02) on January 1, 2019. See Note 9, “Leases.”

In December 2019, the FASB issued ASU 2019-12, Simplifying the Accounting for Income Taxes (Topic 740) by removing certain exceptions permitted under ASC 740, Accounting for Income Taxes, and clarifying existing guidance to facilitate consistent application. We are planning to early adopt this ASU as of January 1, 2020. Since we maintain a full valuation allowance on our net deferred tax assets, the adoption is not expected to have a material impact on our financial condition, results of operations and cash flows, or financial statement disclosures.

Standards issued and not yet implemented

In June 2016, the Financial Accounting Standards Board issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326). The new standard is effective for reporting periods beginning after December 15, 2019. The standard replaces the incurred loss impairment methodology under current GAAP with a methodology that reflects expected credit losses and requires the use of a forward-looking expected credit loss model for accounts receivables, loans, and other financial instruments. The standard requires a modified retrospective approach through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. We plan to adopt the new credit loss standard effective January 1, 2020. We do not expect the new credit loss standard to have a material impact on our financial condition, results of operations and cash flows, or financial statement disclosures.

In August 2018, the FASB issued ASU 2018-15, Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force), (ASU 2018-15). The amendments in ASU 2018-15 align 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 (and hosting arrangements that include an internal-use software license). We do not expect the new standard to have a material effect on our financial condition, results of operations and cash flows, or financial statement disclosures.

Use of estimates

Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Examples include provisions for bad debts and income taxes, estimates of progress on professional service arrangements, bonus accruals, fair value of intangible assets and property and equipment, fair values of share-based awards, and assumptions used to determine the net present value of operating lease liabilities, among other estimates. Actual results may differ from these estimates.

Income (loss) per share

We compute basic per share amounts using the weighted average number of common shares outstanding during the period and exclude any dilutive effects of common stock equivalent shares, such as options and restricted stock units ("RSUs"). We consider RSUs as outstanding and include them in the computation of basic income or loss per share only when vested. We compute diluted per share amounts using the weighted average number of common shares outstanding plus common stock equivalent shares outstanding during the period using the treasury stock method. We exclude common stock equivalent shares from the computation if their effect is anti-dilutive. Unvested but outstanding RSUs are included in the diluted per share calculation. In a period where we are in a net loss position, the diluted loss per share is computed using the basic share count.

The following table presents a reconciliation of the number of shares used in the calculation of basic and diluted per share amounts (in thousands):

	Year Ended December 31,	
	2019	2018
Weighted average common shares outstanding, basic	12,896	12,712
Dilutive potential common shares	—	—
Weighted average common shares outstanding, diluted	12,896	12,712

Common stock equivalent shares of approximately 1,570,000 and 1,714,000 were excluded from the computation of diluted per share amounts for the years ended December 31, 2019 and 2018, respectively, because their effect was anti-dilutive.

Cash, cash equivalents and investments

We invest our excess cash primarily in highly liquid debt instruments of U.S. government agencies and municipalities, debt instruments issued by foreign governments, corporate commercial paper, money market funds, and corporate debt securities. We classify all highly liquid investments with stated maturities of three months or less from date of purchase as cash equivalents and all highly liquid investments with stated maturities of greater than three months and not longer than 12 months as short-term investments.

Short-term investments consist entirely of marketable securities, which are all classified as available-for-sale securities and are recorded at their estimated fair value. We determine the appropriate classification of our investments at the time of purchase and reevaluate such designation at each balance sheet date. We may or may not hold securities with stated maturities greater than 12 months until maturity. As we view these securities as available to support current operations, we classify securities with maturities less than 12 months as short-term investments. We carry these securities at fair value and report the unrealized gains and losses, net of taxes, as a component of shareholders' equity, except for unrealized losses determined to be other than temporary, which are recorded in other expense.

Restricted cash

Restricted cash represents two deposits at a financial institution; one held as security on a letter of credit expiring during 2020 on our headquarters lease obligation, the other held as security on our corporate credit card line.

Financial instruments and concentrations of risk

Financial instruments that potentially subject us to concentrations of credit risk consist principally of cash, cash equivalents, short-term investments, and accounts receivable.

Allowance for doubtful accounts

We record accounts receivable at the invoiced amount net of an estimated allowance for doubtful accounts to reserve for potentially uncollectible receivables. We review customers that have past due invoices to identify specific customers with known disputes or collectability issues. In determining the amount of the allowance, we make judgments about the creditworthiness of significant customers based on ongoing credit evaluations.

Equipment, furniture and leasehold improvements

We account for equipment, furniture and leasehold improvements at cost less accumulated depreciation and amortization. We compute depreciation of equipment and furniture using the straight-line method over the estimated useful lives of the assets, generally three years. Leasehold improvements are amortized using the straight-line method over the shorter of the lease term or estimated useful lives, ranging from two to ten years. We expense maintenance and repair costs as incurred. When assets are retired or otherwise disposed of, gains or losses are included in the consolidated statements of operations. When facts and circumstances indicate that the value of long-lived assets may be impaired, we perform an evaluation of recoverability comparing the carrying value of the asset to projected undiscounted future cash flows. Upon indication that the carrying value of such assets may not be recoverable, we recognize an impairment loss as a charge against current operations based on the difference between the carrying value of the asset and its fair value.

Leases

We lease office facilities, primarily under operating leases, which expire at various dates through 2027. These leases generally contain a renewal options for a defined number of years at the then-fair market rental rate or rate stipulated in the lease agreement; which the Company has an option to exercise at the end of the initial lease term.

We determine if an arrangement is a lease at inception. On our balance sheet, our office facility leases, with a lease term greater than 12-months, are included in Right-of-Use ("ROU") assets and related lease liabilities are included in the Operating leases and Operating leases, long-term statement line items. ROU assets represent our right to use the underlying assets for the lease term and operating lease liabilities represent our obligation to make lease payments arising from the lease agreements. Operating lease ROU assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the term of the lease. For leases that do not provide an implicit rate, we use an incremental borrowing rate based on information available at the commencement date to determine the present value of lease payments. We will use the implicit rate in the lease when readily determinable. The Company accounts for its lease expense with free rent periods and step-rent provisions on a straight-line basis over the original term of the lease and any extension options that the Company more likely than not expects to exercise, from the date the Company has control of the property. Certain leases provide for periodic rental increases based on price indices. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Intangible assets

Intangible assets were recorded in connection with business acquisitions and are stated at estimated fair value at the time of acquisition less accumulated amortization. We amortize our acquired intangible assets using the straight-line method using lives ranging from one to ten years. We review intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. We measure recoverability of these assets by comparing the carrying amounts to the future undiscounted cash flows the assets are expected to generate. If intangible assets are considered impaired, the impairment to be recognized equals the amount by which the carrying value of the asset exceeds its fair market value.

Goodwill

We evaluate goodwill for impairment annually during the fourth quarter or more frequently when an event occurs, or circumstances change that indicate that the carrying value may not be recoverable. We have two reporting units for the purpose of evaluating goodwill for impairment—Partner Solutions and Edge to Cloud. See Note 15, "Information about Operating Segments and Geographic Areas."

For reporting units that carry goodwill, we test for impairment by performing an optional qualitative assessment to determine whether the fair value of the reporting unit is more likely than not less than the carrying amount. If we determine that the fair value of the reporting unit is more likely greater than its carrying amount, we test for impairment by comparing the fair value of the reporting unit to the carrying value, including goodwill, recording an impairment charge for the excess. Alternatively, at our option, we can forego performing the qualitative assessment and proceed directly to perform the impairment test by comparing the fair value of the reporting unit with its carrying amount, including goodwill, and recording an impairment charge for the excess.

Third-party software fees payable

We record all fees payable and accrued liabilities related to the sale of embedded operating system software, such as Microsoft Windows IoT and Windows Mobile operating systems, as third-party software fees payable.

Research and development

Costs incurred internally in researching and developing a computer software product are charged to expense until technological feasibility has been established for the product. Once technological feasibility is established, all software costs would be capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a product is established. Generally, this would be reached after all high-risk development issues have been resolved through coding and testing and would occur shortly before the product is released. Research and development expense was $5.8 million and $8.6 million in 2019 and 2018, respectively

Internally developed software

We capitalize payroll and benefits costs incurred internally during the application development stage of developing a computer software product for general release to customers. Amortization of costs incurred after this point is included in cost of revenue over the estimated life of the products.

Advertising costs

All costs of advertising, including cooperative marketing arrangements, are expensed as incurred. Advertising expense was $154,000 and $171,000 in 2019 and 2018, respectively.

Share-based compensation

The estimated fair value of share-based awards is recognized as compensation expense over the requisite service period, net of estimated forfeitures. We estimate forfeitures of share-based awards based on historical experience and expected future activity. The fair value of RSUs is determined based on the number of shares granted and the quoted price of our common stock on the date of grant. The fair value of stock options is estimated at the grant date based on the fair value of each vesting tranche as calculated by the Black-Scholes-Merton (“BSM”) option-pricing model. The BSM model requires various highly judgmental assumptions including expected volatility and option life. If any of the assumptions used in the BSM model change significantly, share-based compensation expense may differ materially in the future from that recorded in the current period.

Comprehensive loss

Comprehensive loss refers to net loss and other revenue, expenses, gains and losses that, under generally accepted accounting principles, are recorded as an element of shareholders’ equity but are excluded from the calculation of net loss.

Income taxes

We are subject to income taxes in the U.S. and certain foreign jurisdictions. Significant judgment is required in determining our provision for income taxes. We compute income taxes using the asset and liability method, under which deferred income taxes are provided for on the temporary differences between the financial reporting basis and the tax basis of our assets and liabilities. Our deferred tax amounts are measured using currently enacted tax rates that are expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

We apply judgment as to the appropriate weighting of all available evidence when assessing the need for the establishment or the release of valuation allowances. As part of this analysis, we examine all available evidence on a jurisdiction-by-jurisdiction basis and weigh the positive and negative information when determining the need for full or partial valuation allowances. The evidence considered for each jurisdiction includes, among other items, (i) the historical levels of income or loss over a range of time periods that extends beyond the two years presented, (ii) the historical sources of income and losses, (iii) the expectations and risk associated with underlying estimates of future taxable income, (iv) the expectations and risk associated with new product offerings and uncertainties with the timing of future taxable income, and (v) prudent and feasible tax planning strategies. Based on the analysis conducted as of December 31, 2019, we determined that we would not release, in full or in part, the valuation allowance against our U.S. gross deferred tax assets.

We recognize tax benefits from an uncertain position only if it is “more likely than not” that the position is sustainable, based on its technical merits. The tax benefit of a qualifying position is the largest amount of tax benefit that is greater than fifty percent likely of being realized upon ultimate settlement with a taxing authority having full knowledge of all relevant information. Interest and penalties related to uncertain tax positions are classified in the consolidated financial statements as income tax expense.

Foreign currency

The functional currency of foreign subsidiaries is their local currency. Accordingly, assets and liabilities are translated into U.S. dollars at exchange rates in effect at the balance sheet date. Resulting translation adjustments are included in other comprehensive loss and accumulated other comprehensive loss, a separate component of shareholders’ equity. The net gains and losses resulting from foreign currency transactions are recorded in the period incurred and were not significant for any of the periods presented.

Revenue recognition

We recognize revenue when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration that we expect to receive in exchange for those goods or services. We generate all of our revenue from contracts with customers.

Embedded operating system software

We sell embedded operating system software licenses based upon a customer purchase order, shipping a certificate of authenticity ("COA") to satisfy this single performance obligation. These shipments are also subject to limited return rights; historically, returns have averaged less than one-quarter of one percent. In accordance with ASC Topic 606, Revenue from Contracts with Customers, ("Topic 606"), we recognize revenue from third-party products at the time of shipment when the customer accepts control of the COA.

Proprietary software

We sell our proprietary software products to customers under a contract or by purchase order. Our DataV software contracts generally include professional services, a perpetual or term license and support and maintenance. In contracts with multiple performance obligations, we identify each performance obligation and evaluate whether the performance obligations are distinct within the context of the contract at contract inception. Performance obligations that are not distinct at contract inception are combined. Contracts that include software customization may result in the combination of the customization services with the software license as one distinct performance obligation. The transaction price is generally in the form of a fixed fee at contract inception. Certain DataV contracts also include variable consideration in the form of royalties earned when customers meet contractual volume thresholds. We allocate the transaction price to each distinct performance obligation based on the estimated standalone selling price for each performance obligation. We then look to how control of the software transfers to the customer in order to determine the timing of revenue recognition. In contracts that include customer acceptance, we recognize revenue when we have delivered the software and received customer acceptance. We recognize revenue from support and maintenance over the service delivery period. We recognize revenue from royalties in the period of usage.

Our software products, other than for DataV products, generally do not include customization or modification services and are sold in the form of term licenses. These software licenses represent one distinct performance obligation. Revenue is recognized when the software is delivered to the customer.

Professional services

We enter into contracts for professional services, including for our IoT-related service offerings, that include software development and customization. We identify each performance obligation in our professional services contracts at contract inception. The contracts generally include project deliverables specified by each customer. The performance obligations in the contracts are generally combined into one deliverable. The contract pricing is either at stated billing rates per service hour and material costs or at a fixed amount. Services provided under professional engineering contracts generally result in the transfer of control of the applicable deliverable over time. We recognize revenue on service contracts based on time and materials as we have the right to invoice. We recognize revenue on fixed fee contracts on the proportion of labor hours expended (under Topic 606, the 'input method') to the total hours expected to complete the contract performance obligation. Certain professional service contracts include substantive customer acceptance provisions; in which case we recognize revenue upon customer acceptance.

The determination of the total labor hours expected to complete the performance obligations on fixed fee contracts involves significant judgment. We incorporate revisions to hour and cost estimates when the causal facts become known. In certain situations, when it is impractical for us to reasonably measure the outcome of a performance obligation, and where we anticipate that we will not incur a loss, an adjusted cost-based input method is used for revenue recognition. Equal amounts of revenue and cost are recognized during the contract period, and profit is recognized when the project is completed and accepted.

2. Revenue Recognition

Disaggregation of revenue

The following table provides information about disaggregated revenue by primary geographical market, major product line and timing of revenue recognition, and includes a reconciliation of the disaggregated revenue with reportable segments (in thousands):

	Year Ended December 31, 2019			Year Ended December 31, 2018		
	Partner Solutions	Edge to Cloud	Total	Partner Solutions	Edge to Cloud	Total
Primary geographical markets:						
North America	$ 42,443	$ 7,667	$ 50,110	$ 58,523	$ 10,565	$ 69,088
Europe	1,273	750	2,023	2,239	816	3,055
Asia	6,912	238	7,150	397	874	1,271
Total	$ 50,628	$ 8,655	$ 59,283	$ 61,159	$ 12,255	$ 73,414
Major products/services lines:						
Partner Solutions	$ 50,628	$ -	$ 50,628	$ 61,159	$ -	$ 61,159
Edge to Cloud	-	8,655	8,655	-	12,255	12,255
Total	$ 50,628	$ 8,655	$ 59,283	$ 61,159	$ 12,255	$ 73,414

Contract Balances

The following table provides information about receivables, contract assets and contract liabilities from contracts with customers (in thousands):

	December 31, 2019	December 31, 2018
Receivables	$ 9,216	$ 11,581
Short-term contract assets	494	1,053
Long-term contract assets	237	528
Short-term contract liabilities (deferred revenue)	1,559	1,652
Long-term contract liabilities (deferred revenue)	903	1,037

We receive payments from customers based upon contractual billing schedules. Accounts receivable are recorded when the right to consideration becomes unconditional. Contract assets include amounts related to our contractual right to consideration for completed performance objectives not yet invoiced and deferred contract acquisition costs, which are amortized along with the associated revenue. Contract liabilities include payments received in advance of performance under the contract and are realized with the associated revenue recognized under the contract. We had no asset impairment charges related to contract assets in the period.

Significant changes in contract assets and liabilities balances were as follows (in thousands):

	December 31, 2019		December 31, 2018	
	Contract Assets	Contract Liabilities [1]	Contract Assets	Contract Liabilities [1]
Revenue recognized that was included in the contract liability at beginning of the period	$ -	$ 2,033	$ -	$ 3,663
Transferred to receivables from contract assets recognized at beginning of the period	$ 302	$ -	$ 263	$ -

[1] Comprised of deferred revenue

Contract acquisition costs

In connection with the adoption of Topic 606, we capitalize certain contract acquisition costs consisting primarily of commissions paid when contracts are signed. For contracts that have a duration of less than one year, we follow a Topic 606 practical expedient and expense these costs when incurred. For contracts with lives exceeding one year, as is more common with our DataV software bookings, we record these costs in proportion to each completed contract performance obligation. During the years ended December 31, 2019 and December 31, 2018, we recorded $108,000 and $128,000 in amortization of capitalized contract acquisition costs, respectively. There were no impairment losses recorded related to costs capitalized. Contract acquisition costs capitalized during the years ended December 31, 2019 and December 31, 2018 were $151,000 and $748,000, respectively.

Performance obligations

We did not recognize any revenue from performance obligations satisfied in previous periods.

The following table includes estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied or partially unsatisfied at the end of the reporting period, in thousands. The estimated revenue does not include contracts with original durations of one year or less, amounts of variable consideration attributable to royalties, or contract renewals that were unexercised as of December 31, 2019.

	2020	2021	2022	2023	2024	Thereafter
Partner Solutions	$ 14	$ -	$ -	$ -	$ -	$ -
Edge to Cloud	1,581	2,232	274	-	-	-

Practical expedients and exemptions

We generally expense sales commissions when incurred because the amortization period would have been less than one year. We record these costs within selling, general and administrative expenses.

The Company has the right to invoice customers in an amount that directly corresponds with the value to the customer of the Company's performance to date and recognizes revenue based on the invoiced amount.

3. Cash and Investments

Cash, cash equivalents, restricted cash, and short-term investments consisted of the following (in thousands):

	December 31,	
	2019	2018
Cash	$ 4,092	$ 6,780
Cash equivalents (see detail in Note 4)	3,620	3,225
Restricted cash	600	263
Restricted cash, long-term (see detail in Note 4)	-	263
Total cash, cash equivalents and restricted cash as presented in the statement of cash flows	8,312	10,531
Short-term investments (see detail in Note 4)	2,249	6,409
Total cash, cash equivalents, restricted cash and short-term investments	$ 10,561	$ 16,940

4. Fair Value Measurements

We measure our cash equivalents, restricted cash, and short-term investments at fair value. Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. A three-tier fair value hierarchy is established as a basis for considering such assumptions and for inputs used in the valuation methodologies in measuring fair value:

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

Level 2: Directly or indirectly observable market-based inputs or unobservable inputs used in models or other valuation methodologies.

Level 3: Unobservable inputs that are not corroborated by market data. The inputs require significant management judgment or estimation.

We classify our cash equivalents, restricted cash, and short-term investments within Level 1 or Level 2 because our cash equivalents and short-term investments are valued using quoted market prices or alternative pricing sources and models utilizing market observable inputs. We review the pricing techniques and methodologies of the independent pricing service for Level 2 investments and believe that the policies adequately consider market activity, either based on specific transactions for the security valued or based on modeling of securities with similar credit quality, duration, yield and structure that were recently traded.

Assets and liabilities measured at fair value on a recurring basis were as follows (in thousands):

	December 31, 2019		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Direct or Indirect Observable Inputs (Level 2)	Total
Assets			
Cash equivalents:			
Money market funds	$ 1,871	$ -	$ 1,871
Corporate commercial paper	-	999	999
Corporate debt	-	750	750
Total cash equivalents	1,871	1,749	3,620
Restricted cash:			
Money market funds	600	-	600
Short-term investments:			
Corporate commercial paper	-	748	748
Corporate debt	-	1,501	1,501
Total short-term investments	-	2,249	2,249
Total assets measured at fair value	$ 2,471	$ 3,998	$ 6,469

	December 31, 2018		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Direct or Indirect Observable Inputs (Level 2)	Total
Assets			
Cash equivalents:			
Money market funds	$ 1,277	$ -	$ 1,277
Corporate commercial paper	-	1,198	1,198
Corporate debt	-	750	750
Total cash equivalents	1,277	1,948	3,225
Restricted cash:			
Money market funds	526	-	526
Short-term investments:			
Corporate commercial paper	-	3,874	3,874
Corporate debt	-	2,535	2,535
Total short-term investments	-	6,409	6,409
Total assets measured at fair value	$ 1,803	$ 8,357	$ 10,160

As of December 31, 2019 and 2018, contractual maturities of our short-term investments were less than one year, and gross unrealized gains and losses on those investments were not material.

5. Equipment, Furniture and Leasehold Improvements

Equipment, furniture, and leasehold improvements consisted of the following (in thousands):

	December 31,	
	2019	2018
Computer equipment and software	$ 1,290	$ 1,637
Office furniture and equipment	262	302
Leasehold improvements	1,165	1,163
Software development costs	45	329
Total	2,762	3,431
Less: accumulated depreciation and amortization	(2,510)	(2,520)
Equipment, furniture and leasehold improvements, net	$ 252	$ 911

Depreciation and amortization expense related to these assets was $799,000 and $541,000 in 2019 and 2018, respectively.

6. Goodwill and Intangible Assets

Goodwill was recorded in connection with the September 2011 acquisition of MPC Data, Ltd. (renamed BSQUARE EMEA, Ltd. in 2015), a United Kingdom based provider of software engineering services.

For 2018, we performed our annual goodwill assessment in the fourth quarter of 2018. We chose to forego performing the qualitative assessment and proceeded directly to performing the quantitative impairment test by comparing the fair value of our Professional Engineering Service (PES) reporting unit (renamed to Edge to Cloud in Q3 2019) with its carrying value, including goodwill, recording an impairment charge for the excess. When performing the assessment, we determined the fair value of our PES reporting unit based on our forecast of future revenue and expense cash flow streams. Based on the uncertainty of future sales for new PES services and the results of this assessment, we determined that the carrying value of goodwill was impaired. As a result, an impairment charge of $3.7 million was recorded.

For 2019, there was no carrying amount of goodwill recorded on the balance sheet.

The carrying value of goodwill consisted of the following (in thousands):

	Cost	Impairment Loss	Net Carrying Value
Reconciliation of Goodwill carrying amount:			
Balance as of December 31, 2019	$ -	$ -	$ -
Balance as of December 31, 2018	$ 3,738	$ (3,738)	$ -

Intangible assets relate to customer relationships that we acquired from TestQuest, Inc. in November 2008 and from the acquisition of BSQUARE EMEA, Ltd. in September 2011 and were as follows (in thousands):

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value
Customer relationships:			
Balance as of December 31, 2019	$ 1,275	$ (1,106)	$ 169
Balance as of December 31, 2018	$ 1,275	$ (1,008)	$ 267

Amortization expense was $98,000 for both 2019 and 2018. Amortization expense in future periods is expected to be as follows (in thousands):

2020	$ 98
2021	71
Total	$ 169

7. Other Income and Loss

Other income and loss consisted of the following (in thousands):

	Year Ended December 31, 2019	2018
Interest income	$ 179	$ 207
Other income (loss)	(30)	-
Total	$ 149	$ 207

8. Income Taxes

Pre-tax loss consisted of the following (in thousands):

	Year Ended December 31, 2019	Year Ended December 31, 2018
U.S.	$ (8,225)	$ (13,081)
Foreign	(940)	(643)
Total	$ (9,165)	$ (13,724)

Income tax expense consisted of the following (in thousands):

	Year Ended December 31, 2019	Year Ended December 31, 2018
Current taxes:		
Federal	$ -	$ -
State and local	16	13
Foreign	-	-
Current taxes	16	13
Deferred taxes:		
Federal	-	-
State and local	-	-
Foreign	-	-
Deferred taxes	-	-
Total	$ 16	$ 13

Net deferred tax assets and liabilities consisted of the following (in thousands):

	December 31, 2019	December 31, 2018
Net operating loss carryforwards	$ 18,677	$ 17,443
Research and development credit carryforwards	3,576	3,337
Share-based compensation	645	1,006
Accrued expenses and reserves	127	47
Depreciation and amortization	17	48
Deferred revenue	275	(63)
Other	14	19
Gross deferred tax assets	23,331	21,837
Less: valuation allowance	(23,324)	(21,830)
Net deferred tax assets	$ 7	$ 7

Net deferred tax assets and liabilities were recorded as follows (in thousands):

	December 31, 2019	December 31, 2018
Deferred tax assets, non-current	$ 7	$ 7
Deferred tax liability, non-current	-	-
Net deferred tax assets	$ 7	$ 7

As of December 31, 2019, our deferred tax assets were primarily the result of U.S. net operating loss, research and development credit carryforwards and share-based compensation expense. We have applied a full valuation allowance against the U.S. deferred tax assets in the U.S. and foreign jurisdictions.

We use judgment as to the appropriate weighting of all available evidence when assessing the need for the establishment or the release of valuation allowances. As part of this analysis, we examine all available evidence on a jurisdiction-by-jurisdiction basis and weigh the positive and negative information when determining the need for full or partial valuation allowances. The evidence considered for each jurisdiction includes, among other items, (i) the historical levels of income or loss over a range of time periods that extends beyond the two years presented, (ii) the historical sources of income and losses, (iii) the expectations and risk associated with underlying estimates of future taxable income, (iv) the expectations and risk associated with new product offerings and uncertainties with the timing of future taxable income, and (v) prudent and feasible tax planning strategies. Based on the analysis conducted as of December 31, 2019, we determined that we would not release, in full or in part, the valuation allowance against our U.S. gross deferred tax assets.

The provision for income taxes differed from the amount of expected income tax expense determined by applying the applicable U.S. statutory federal income tax rate to pre-tax loss as follows (in thousands, except percentages):

	Year Ended December 31,			
	2019		2018	
U.S. Federal tax benefit at statutory rates	$ (1,925)	21.0%	$ (2,889)	21.0%
Impact of:				
Tax credits	(715)	7.8	(517)	3.8
State income tax	(108)	1.2	10	(0.1)
International operations	409	(4.5)	30	(0.2)
Share-based compensation	348	(3.8)	2	-
Valuation allowance	1,471	(16.0)	2,280	(16.6)
Expiration of tax attributes	475	(5.2)	217	(1.6)
Goodwill impairment	-	-	784	(5.7)
Other, net	61	(0.7)	96	(0.7)
Tax expense and effective tax rate	$ 16	(0.2)%	$ 13	(0.1)%

At December 31, 2019, we had approximately $79.7 million of federal and $12.4 million of state net operating loss carryforwards, which have begun to expire. Of the federal net operating loss carryforwards, approximately $45.7 million will expire by 2024 and $17.0 million are indefinite. We also have approximately $3.6 million of tax credit carryforwards, which have begun to expire. Use of these carryforwards may subject us to an annual limitation due to Section 382 of the U.S. Internal Revenue Code that restricts the ability of a corporation that undergoes an ownership change to use its carryforwards. Under the applicable tax rules, an ownership change occurs if holders of more than five percent of an issuer's outstanding common stock, collectively, increase their ownership percentage by more than 50 percentage points over a rolling three-year period. We have performed analyses of possible ownership changes in the past, which included consideration of third-party studies, and do not believe that an ownership change of more than 50 percentage points has occurred.

We have evaluated all the material income tax positions taken on our income tax filings to various tax authorities, and we determined that we did not have unrealized tax benefits related to uncertain tax positions recorded at December 31, 2019 or 2018.

Because of net operating loss and tax credit carryforwards, substantially all of our tax years remain open and subject to examination.

9. Leases

We adopted ASU 2016-02 effective January 1, 2019 and elected the modified retrospective transition method, recording a cumulative-effect adjustment as of that date and presenting comparative prior year periods in accordance with Accounting Standards Codification Topic 840. On the date of adoption, we recorded a cumulative adjustment to recognize new net lease liabilities of $1.7 million and new right-of-use (ROU) assets of $1.2 million, for operating leases on our consolidated balance sheets, based on the present value of remaining rental payments for existing operating leases. As part of adoption, we also de-recognized $0.5 million in deferred rent. Adoption of the standard did not have a material impact on our statement of operations or statement of cash flows. As part of adoption, we elected the short-term lease recognition exemption for our facility rental and equipment leases (all leases that qualified), which means that we did not recognize ROU assets or lease liabilities for existing short-term leases (leases of 12-months or less) as of the January 1, 2019 adoption date. In addition, when adopting ASU 2016-02 we applied the following practical expedients to forego assessing:

- whether any expired or existing contracts are or contain a lease,
- lease classification for any expired or existing leases, and

- initial direct costs for any existing leases.
- to separate non-lease components from lease components for leases of real estate assets.

We determine if an arrangement is a lease at inception. On our balance sheet, our office leases are included in ROU assets and related lease liabilities are included in the Operating leases and Operating leases, long-term statement line items. We determined that we do not currently have finance leases.

ROU assets represent our right to use the underlying assets for the lease term and operating lease liabilities represent our obligation to make lease payments arising from the lease agreements. Operating lease ROU assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the term of the lease. For leases that do not provide an implicit rate, we use an incremental borrowing rate based on information available at the commencement date to determine the present value of lease payments. We will use the implicit rate in the lease when readily determinable. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Our leases have remaining terms of one to eight years. The only leases that contain renewal options are for office space leases at our Bellevue and Taiwan locations. As of January 1, 2019, because of changes in our business, we were not able to determine with reasonable certainty whether we will renew our Bellevue or Taiwan leases, As a result, we have not considered renewal options when recording ROU assets, lease liabilities or lease expense. In the fourth quarter of 2019, we made the decision not to renew our Bellevue lease, which expires at the end of May 2020 and we do not intend to renew our Taiwan lease (see Note 17, "Restructuring Costs").

In December 2019, we entered into an operating lease agreement for a new corporate office facility in Seattle, Washington. The term of the lease is 87 months, with a rent date starting on May 1, 2020 and the lease term ending on July 31, 2027. As a result of entering this lease agreement December 2019, we recorded additional ROU assets and net lease liabilities of $1.2 million on our consolidated balance sheets. There was no material impact to our statement of operations or statement of cash flows as a result of entering into this lease.

Total component lease expense was as follows (in thousands):		**Twelve months ended December 31, 2019**
Operating leases	$	992
Supplemental cash flow information related to leases was as follows (in thousands):		
Cash paid for amounts included in the measurement of lease liabilities	$	1,359
Supplemental balance sheet information related to leases was as follows (dollars in thousands):		**December 31, 2019**
Operating leases:		
Right of use	$	1,828
Current portion of operating leases liability	$	702
Operating leases liability, net of current portion		1,256
Total operating leases liabilities	$	1,958
Weighted Average Remaining Lease Term		5.25 years
Weighted Average Discount Rate		8.0%

Future operating lease commitments are as follows (in thousands):

As of December 31, 2019, maturities of lease liabilities were as follows:		**Operating leases**
Years Ended December 31,		
2020	$	727
2021		304
2022		249
2023		255
2024		262
Thereafter		709
Total minimum lease payments		2,506
Less: amount representing imputed interest		(548)
Present value of lease liabilities	$	1,958

10. Commitments and Contingencies

Lease and rent obligations

Our commitments include obligations outstanding under operating leases, which expire through 2027. We have lease commitments for office space in Bellevue, Washington; Seattle, Washington; and Trowbridge, UK. See Note 9, “Leases.”

Loss contingencies

From time to time, we are subject to legal proceedings, claims, and litigation arising in the ordinary course of business including tax assessments. We defend ourselves vigorously against any such claims. When (i) it is probable that an asset has been impaired, or a liability has been incurred and (ii) the amount of the loss can be reasonably estimated, we record the estimated loss. We provide disclosure in the notes to the consolidated financial statements for loss contingencies that do not meet both of these conditions if there is a reasonable possibility that a loss may have been incurred that would be material to the financial statements. Significant judgment is required to determine the probability that a liability has been incurred and whether such liability is reasonably estimable. We base accruals made on the best information available at the time, which can be highly subjective. The final outcome of these matters could vary significantly from the amounts included in the accompanying consolidated financial statements.

11. Shareholders’ Equity

Equity compensation plans

We have a stock plan (the “Stock Plan”) and an inducement stock plan for newly hired employees (the “Inducement Plan”) (collectively the “Plans”). Under the Plans, stock options may be granted with a fixed exercise price that is equivalent to the fair market value of our common stock on the date of grant. These options have a term of up to 10 years and vest over a predetermined period, generally four years. Incentive stock options granted under the Stock Plan may only be granted to our employees. The Plans also allow for awards of non-qualified stock options, stock appreciation rights, restricted and unrestricted stock awards, and RSUs.

Share-based compensation

The estimated fair value of share-based awards is recognized as compensation expense over the vesting period of the award, net of estimated forfeitures. We estimate forfeitures based on historical experience and expected future activity. The fair value of RSUs is determined based on the number of shares granted and the quoted price of our common stock on the date of grant. The fair value of stock options is estimated at the grant date based on the fair value of each vesting tranche as calculated by the Black-Scholes-Merton (“BSM”) option-pricing model. The BSM model requires various highly judgmental assumptions including expected volatility and option life. If any of the assumptions used in the BSM model change significantly, share-based compensation expense may differ materially in the future from that recorded in the current period. The fair values of our stock option grants were estimated with the following weighted average assumptions:

	Year Ended December 31,	
	2019	2018
Dividend yield	0%	0%
Expected life	4.9 years	6.1 years
Expected volatility	59%	56%
Risk-free interest rate	1.6%	2.6%

The impact on our results of operations from share-based compensation expense was as follows (in thousands, except per share amounts):

	Year Ended December 31,	
	2019	2018
Cost of revenue— professional engineering service	$ 1	$ 28
Selling, general and administrative	546	460
Research and development	(28)	190
Total share-based compensation expense	$ 519	$ 678
Per basic share	$ 0.04	$ 0.05
Per diluted share	$ 0.04	$ 0.05

Stock option activity

The following table summarizes stock option activity:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Balance at December 31, 2017	1,912,161	$ 4.88	7.61	
Granted	316,393	3.63		
Exercised	(2,422)	3.59		
Forfeited	(434,374)	4.88		
Expired	(401,746)	4.27		
Balance at December 31, 2018	1,390,012	4.77	6.83	
Granted	958,798	1.69		
Exercised	—	-		
Forfeited	(251,213)	4.81		
Expired	(552,771)	5.07		
Balance at December 31, 2019	1,544,826	2.74	7.47	$ 46,582
Vested and expected to vest at December 31, 2019	1,278,079	2.95	7.04	32,307
Exercisable at December 31, 2019	525,289	$ 4.52	3.92	$ 31

At December 31, 2019, total compensation cost related to stock options granted but not yet recognized was approximately $553,906, net of estimated forfeitures. This cost will be amortized on the straight-line method over a weighted-average period of approximately 2.3 years.

The following table summarizes certain additional information about stock options:

	Year Ended December 31, 2019	Year Ended December 31, 2018
Weighted average grant-date fair value for options granted during the year	$ 1.33	$ 1.81
Vested options in-the-money	344	—
Aggregate intrinsic value of options exercised during the year	$ —	$ 1,853

The aggregate intrinsic value represents the difference between the exercise price of the underlying options and the quoted price of our common stock for the number of options that were exercised during the periods indicated. We issue new shares of common stock upon exercise of stock options.

Restricted stock unit activity

The following table summarizes RSU activity:

	Number of Shares	Weighted Average Award Price
Unvested at December 31, 2017	116,968	$ 5.33
Granted	251,371	2.72
Vested	(113,535)	4.19
Forfeited	(68,288)	4.30
Unvested at December 31, 2018	186,516	2.87
Granted	225,693	1.44
Vested	(264,720)	2.03
Forfeited	(34,643)	4.68
Unvested at December 31, 2019	112,846	1.44
Expected to vest after December 31, 2019	106,295	$ 1.44

At December 31, 2019, total compensation cost related to RSUs granted but not recognized was approximately $53,566, net of estimated forfeitures. This cost will be amortized on the straight-line method over a weighted-average period of approximately 0.3 years.

Common stock reserved for future issuance

The following table summarizes our shares of common stock reserved for future issuance under the Plans as of December 31, 2019:

Stock options outstanding	1,544,826
Restricted stock units outstanding	112,846
Stock options available for future grant	1,730,036
Common stock reserved for future issuance	3,387,708

12. Employee Benefit Plan

We maintain a Profit Sharing and Deferred Compensation Plan, The BSQUARE Corporation 401(k) Plan and Trust (the “Profit Sharing Plan”) under Section 401(k) of the Internal Revenue Code. Substantially all full-time employees are eligible to participate in the Profit-Sharing Plan. We typically elect to match the participants’ contributions to the Profit-Sharing Plan up to a certain amount subject to vesting. Participants will receive their share of the value of their investments, and any applicable vested match, upon retirement or termination. We made matching contributions of $256,000 and $439,000 in 2019 and 2018, respectively.

13. Significant Concentrations

Significant customer

Honeywell International, Inc. and affiliated entities (“Honeywell”) accounted for revenue and accounts receivable as follows (in thousands, except percentages):

	Year Ended December 31,	
	2019	2018
Honeywell revenue	$ 1,737	$ 7,013
As a percentage of total revenue	3%	10%

	December 31,	
	2019	2018
Honeywell accounts receivable	$ 1,223	$ 2,758
As a percentage of total accounts receivable	13%	24%

No other customer accounted for 10% or more of total revenue in 2019 or 2018 or 10% or more of total accounts receivable at December 31, 2019 or 2018.

Significant supplier

Effective March 1, 2019, pursuant to a Global Partnership Agreement with Microsoft, we are authorized to sell Windows IoT operating systems in Canada, the United States, Argentina, Brazil, Chile, Mexico, Peru, Venezuela, Puerto Rico, Columbia, and several Caribbean countries. Of our total revenue, 79% in 2019 and 75% in 2018 resulted from the sale of Windows IoT operating systems. Our existing distribution agreement for sales of Windows IoT operating systems in the European Union (“E.U.”), the European Free Trade Association, Turkey and Africa, expired on June 30, 2019 and was not renewed thereafter. We generated approximately 3% of our Partner Solutions software sales under this agreement in 2019. We have also entered into ODAs with Microsoft pursuant to which we are licensed to sell Microsoft Windows Mobile operating systems to customers in North America, South America, Central America (excluding Cuba), Japan, Taiwan, Europe, the Middle East, and Africa. The ODAs to sell Windows Mobile operating systems are effective through April 30, 2022.

Software sales under these agreements constitute a significant portion of our software revenue and total revenue. There is no automatic renewal provision in any of these agreements, and these agreements can be terminated unilaterally by Microsoft at any time.

Microsoft currently offers a rebate program to sell Microsoft Windows IoT operating systems pursuant to which we earn money for achieving certain predefined objectives. In accordance with Microsoft rebate program rules, we allocate 20% and 30% of rebates in 2019 and 2018, respectively, to reduce cost of sales, with the remaining 80% in 2019 and 70% in 2018 used to offset qualified marketing expenses in the period the expenditures are claimed and approved.

Under this rebate program, we recorded rebate credits as follows (in thousands):

	Year Ended December 31,	
	2019	2018
Reductions to cost of revenue	$ 314	$ 718
Reductions to marketing expense	$ 1,217	$ 682

There was a balance of approximately $1.0 million in outstanding rebate credits for which we qualified as of December 31, 2019. If qualified program expenditures are made, these will be accounted for as reductions in marketing expense in the period in which such expenditures are made.

14. Credit Agreement

Line of credit

In September 2015, we entered into a two-year unsecured line of credit agreement (the “Credit Agreement”) with JPMorgan Chase Bank, N.A. in the principal amount of up to $12.0 million. In September 2016, the Credit Agreement was modified to extend the final due date an additional year to September 2018, at which point it expired. No borrowings were ever outstanding under the Credit Agreement.

15. Information about Operating Segments and Geographic Areas

Our chief operating decision-makers (i.e. our Chief Executive Officer and certain direct reports) review financial information presented on a consolidated basis, accompanied by disaggregated information for purposes of allocating resources and evaluating financial performance. There are no segment managers who are held accountable by our chief operating decision-makers, or anyone else, for operations, operating results, or planning for levels or components below the consolidated unit level. We operate within a single industry segment of computer software and services. Effective as of July 1, 2019, we made the following changes to our operating segments:

- Our Third-Party Software operating segment was renamed to Partner Solutions;
- Our Professional Engineering Service operating segment was renamed to Edge to Cloud; and
- We no longer present separate information for the Proprietary Software operating segment. Results are no longer quantifiably significant, nor does management view the segment as of continuing significance after deciding to stop marketing of DataV as an IoT platform in the second quarter of 2019. Results for the Proprietary Software segment are now combined with the Edge to Cloud segment as part of continuing operations, with prior period segment results recast to reflect our reporting segments on a comparable basis.

As of July 1, 2019, we have two major product lines – Partner Solutions and Edge to Cloud– each of which we consider to be operating and reportable segments. We do not allocate costs other than direct cost of goods sold to the segments or produce segment income statements, and we do not produce asset information by reportable segment. The following table sets forth profit and loss information about our segments (in thousands):

	Year Ended December 31,	
	2019	2018
Partner Solutions:		
Revenue	$ 50,628	$ 61,159
Cost of revenue	43,198	51,408
Gross profit	7,430	9,751
Edge to Cloud:		
Revenue	8,655	12,255
Cost of revenue	5,989	6,496
Gross profit	2,666	5,759
Total gross profit	10,096	15,510
Operating expenses	19,410	29,441
Other income, net	149	207
Income tax expense	(16)	(13)
Net loss	$ (9,181)	$ (13,737)

Revenue by geography is based on the sales region of the customer. The following tables set forth revenue and long-lived assets by geographic area (in thousands):

	Year Ended December 31,	
	2019	2018
Total revenue:		
North America	$ 50,110	$ 69,088
Asia	7,150	1,271
Europe	2,023	3,055
Total revenue	$ 59,283	$ 73,414

	December 31,	
	2019	2018
Long-lived assets:		
North America	$ 2,016	$ 1,578
Asia	177	91
Europe	340	322
Total long-lived assets	$ 2,533	$ 1,991

16. Impairment of Software Development Costs

As a result of an impairment analysis associated with our long-lived equipment, furniture and leasehold improvement assets, the Company recorded a charge of $0.4 million related to certain software development cost assets during the three months ended June 30, 2019. For the twelve months of 2019 and 2018, we incurred charges of $0.4 million and none, respectively, for impairment of software development costs. The charges are reflected in the “Restructuring costs” line item on the Company’s consolidated statement of operations and comprehensive loss.

17. Restructuring Costs

In May 2019, we approved a severance plan that included a workforce elimination of approximately 38 positions in the U.S. and internationally. In October 2019, we determined to close our Taiwan branch office by December 31, 2019, which resulted in elimination of approximately 17 additional positions. An involuntary termination benefit plan was done in order to reduce go-forward operating costs and re-align our go-forward business model to support future business initiatives. The costs associated with these actions consist primarily of charges for restructuring costs related to severance and benefits, and a non-cash impairment charge related to certain software development cost assets. We incurred aggregate restructuring charges of approximately $2.3 million associated with these actions. During the twelve months of 2019 and 2018, we incurred $2.3 million and none, respectively, in charges for restructuring costs under this plan. For the twelve months ended December 31, 2019, $1.5 million in restructuring costs were paid. The ending balance for accrued restructuring charges is $0.5 million as of December 31, 2019 and is included as part of accrued compensation on the consolidated balance sheets.

Summary of Restructuring Costs

The following tables show the activity and estimated timing of future payouts for accrued restructuring costs (in thousand):

	Year Ended December 31,	
	2019	2018
Balance as of December 31, 2018	$ -	$ —
Restructuring costs	2,343	—
Non-cash asset impairment charge	(375)	—
Cash payments	(1,507)	—
Balance as of December 31, 2019	$ 461	$ —

	As of December 31,	
Estimated timing of future payments:	2019	2018
Expected to be paid in 2020	$ 461	$ —

18. Quarterly Financial Information (Unaudited)

	Condensed Consolidated Statements of Operations 2019			
	Q1	Q2	Q3	Q4
	(in thousands, except per share data)			
Revenue	$ 15,096	$ 14,180	$ 14,641	$ 15,366
Gross profit	2,391	2,423	2,632	2,650
Loss from operations	(2,879)	(3,929)	(1,129)	(1,377)
Net loss	(2,846)	(3,868)	(1,107)	(1,360)
Basic loss per share	(0.22)	(0.30)	(0.09)	(0.10)
Diluted loss per share	$ (0.22)	$ (0.30)	$ (0.09)	$ (0.10)
Shares used in per share calculations:				
Basic	12,795	12,855	12,934	12,997
Diluted	12,795	12,855	12,934	12,997

	2018			
	Q1	Q2	Q3	Q4
	(in thousands, except per share data)			
Revenue	$ 20,678	$ 19,203	$ 16,694	$ 16,839
Gross profit	5,200	3,261	3,359	3,690
Loss from operations	(2,478)	(3,718)	(2,132)	(5,603)
Net loss	(2,434)	(3,683)	(2,087)	(5,533)
Basic loss per share	(0.19)	(0.29)	(0.16)	(0.43)
Diluted loss per share	$ (0.19)	$ (0.29)	$ (0.16)	$ (0.43)
Shares used in per share calculations:				
Basic	12,673	12,697	12,721	12,755
Diluted	12,673	12,697	12,721	12,755

Condensed Consolidated Balance Sheets

	2019			
	March 31	June 30	September 30	December 31
	(in thousands)			
Cash, cash equivalents, restricted cash and short-term investments	$ 15,000	$ 12,560	$ 11,610	$ 10,561
Total current assets	26,428	22,897	21,442	20,515
Total assets	29,673	24,967	23,056	23,055
Total current liabilities	12,464	11,882	11,226	11,200
Total shareholders' equity	$ 15,673	$ 11,835	$ 10,888	$ 9,696

	2018			
	March 31	June 30	September 30	December 31
	(in thousands)			
Cash, cash equivalents, restricted cash and short-term investments	$ 21,435	$ 17,861	$ 17,271	$ 16,940
Total current assets	39,913	35,514	32,102	29,996
Total assets	45,110	41,000	37,648	31,994
Total current liabilities	15,289	14,189	12,744	12,466
Total shareholders' equity	$ 29,340	$ 25,635	$ 23,858	$ 18,341

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

Item 9A. ***Controls and Procedures.***

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that the information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934 (“Exchange Act”) is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In connection with the preparation of this Form 10-K, our management carried out an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, as of December 31, 2019, of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) and 15d-15(e) under the Exchange Act. Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2019.

Management’s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements for external purposes in accordance with generally accepted accounting principles. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act and includes those policies and procedures that: (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements. All internal controls, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework (2013)*.

Based on its assessment, our management concluded that, as of December 31, 2019, our internal control over financial reporting was effective.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the fourth quarter of 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. ***Other Information***

None.

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance***

The information required by this Item is incorporated by reference to our definitive proxy statement for our 2020 annual meeting of shareholders which will be filed with the SEC no later than 120 days after December 31, 2019 (our "2020 Proxy Statement").

Item 11. ***Executive Compensation***

The information required by this Item is incorporated by reference to our 2020 Proxy Statement.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The information required by this Item is incorporated by reference to our 2020 Proxy Statement.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence***

The information required by this Item is incorporated by reference to our 2020 Proxy Statement.

Item 14. ***Principal Accounting Fees and Services***

The information required by this Item is incorporated by reference to our 2020 Proxy Statement.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules***

(a) Financial Statements and Schedules

1. *Financial Statements*

See “Index to Consolidated Financial Statements” in Part II Item 8 of this report.

2. *Financial Statement Schedules*

Financial statement schedules not included herein have been omitted because they are either not required, not applicable, or the information is otherwise included herein.

3. *Exhibits*

Exhibits are incorporated herein by reference or are filed with this report as indicated below.

(b) Exhibits

Exhibit Number	Description	Filed or Furnished Herewith	Incorporated by Reference Form	Filing Date	Exhibit	File No.
3.1	Amended and Restated Articles of Incorporation		S-1	8/17/1999	3.1(a)	333-85351
3.1(a)	Articles of Amendment to Amended and Restated Articles of Incorporation		10-Q	8/7/2000	3.1	000-27687
3.1(b)	Articles of Amendment to Amended and Restated Articles of Incorporation		8-K	10/11/2005	3.1	000-27687
3.2	Bylaws and all amendments thereto		10-K	3/19/2003	3.2	000-27687
4.1	Description of Capital Stock	X				
10.1(1)	Fourth Amended and Restated Stock Plan, as amended		S-8	8/8/2017	4.1	333-219799
10.1(a)(1)	Form of Stock Option Agreement		10-Q	8/9/2012	10.19(a)	000-27687
10.1(b)(1)	Form of Restricted Stock Grant Agreement		10-Q	8/9/2012	10.19(b)	000-27687
10.1(c)(1)	Form of Restricted Stock Unit Agreement		10-Q	8/9/2012	10.19(c)	000-27687
10.2(1)	2011 Inducement Award Plan		10-Q	11/10/2011	10.1	000-27687
10.2(a)(1)	Form of Stock Option Agreement under the 2011 Inducement Award Plan		10-Q	11/10/2011	10.1(a)	000-27687
10.2(b)(1)	Form of Restricted Stock Unit Agreement under the 2011 Inducement Award Plan		10-K	2/19/2015	10.2(b)	000-27687
10.3(1)	Form of Indemnification Agreement		10-K	2/21/2017	10.3	000-27687
10.4	Office Lease Agreement between WA—110 Atrium Place, L.L.C. and BSQUARE Corporation		10-K	3/30/2004	10.19	000-27687
10.4(a)	First Amendment to Office Lease with Talon Portfolio Services LLC dated August 26, 2013 and effective June 1, 2013		8-K	8/30/2013	10.1	000-27687
10.5(1)	Employment Letter Agreement with Kevin T. Walsh dated June 26, 2015		10-Q	8/13/2018	10.2	000-27687
10.6(1)	Amendment to employment letter agreement with Kevin T. Walsh dated November 6, 2018	X				
10.7(1)	Employment Letter Agreement with Peter J. Biere dated November 28, 2016		10-K	2/21/2017	10.6	000-27687
10.8(1)	Employment Letter Agreement dated February 23, 2017 with Scott B. Caldwell		10-Q	5/15/2017	10.2	000-27687
10.9(1)	Employment letter agreement with Giles Frith dated August 31, 2016		10-Q	8/13/2018	10.3	000-27687
10.10(1)	Amendment to employment letter agreement with Giles Frith dated June 5, 2018		10-Q	8/13/2018	10.4	000-27687
10.11(1)	Employment letter agreement with Ralph Derrickson dated February 4, 2019	X				
10.12(2)	Microsoft OEM Distribution Agreement for Software Products for Embedded Systems with Microsoft Licensing, GP effective July 1, 2014		10-Q	8/14/2014	10.1	000-27687
10.13	Board Observer Agreement with Palogic Value Fund, L.P, Palogic Value Management, L.P. and Palogic Capital Management, LLC dated June 25, 2018		8-K	6/26/2018	10.1	000-27687
21.1	Subsidiaries of the registrant	X				
23.1	Consent of Independent Registered Public Accounting Firm	X				
31.1	Certification of Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a) under the Securities and Exchange Act of 1934	X				
31.2	Certification of Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a) under the Securities and Exchange Act of 1934	X				
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as	X				

Exhibit Number	Description	Filed or Furnished Herewith	Incorporated by Reference			
			Form	Filing Date	Exhibit	File No.
	Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X				
101.INS	XBRL Instance Document	X				
101.SCH	XBRL Taxonomy Extension Schema Document	X				
101.CAL	XBRL Taxonomy Extension Calculation Document	X				
101.DEF	XBRL Taxonomy Extension Definitions	X				
101.LAB	XBRL Taxonomy Extension Label Document	X				
101.PRE	XBRL Taxonomy Extension Presentation Document	X				

(1) Indicates a management contract or compensatory plan or arrangement.
(2) Confidential treatment has previously been granted by the SEC for certain portions of the referenced exhibit.

Item 16. *Form 10-K Summary*

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BSQUARE CORPORATION

Date: February 24, 2020

By: /S/ RALPH C. DERRICKSON
Ralph C. Derrickson
President and Chief Executive Officer

Date: February 24, 2020

By: /S/ CHRISTOPHER WHEATON
Christopher Wheaton
Chief Financial Officer, Secretary and Treasurer

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints Ralph C. Derrickson and Christopher Wheaton, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his true and lawful attorney-in-fact and agent to act in his name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file, any and all amendments to this report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on February 24, 2020, on behalf of the registrant and in the capacities indicated.

Signature	Title
/S/ RALPH C. DERRICKSON **Ralph C. Derrickson**	President and Chief Executive Officer (Principal Executive Officer)
/S/ CHRISTOPHER WHEATON **Christopher Wheaton**	Chief Financial Officer, Secretary and Treasurer (Principal Financial Officer)
/S/ ANDREW S. G. HARRIES **Andrew S. G. Harries**	Chairman of the Board
/S/ ROBERT J. CHAMBERLAIN **Robert J. Chamberlain**	Director
/S/ DAVIN W. CUSHMAN **Davin W. Cushman**	Director
/S/ MARY JESSE **Mary Jesse**	Director
/S/ ROBERT J. PETERS **Robert J. Peters**	Director
/S/ RYAN L. VARDEMAN **Ryan L. Vardeman**	Director

DIRECTORS, OFFICERS AND CORPORATE INFORMATION

DIRECTORS

Andrew S.G. Harries
Chairman of the Board
Co-Founder, Sierra Wireless (SWIR) and Zeugma Systems Inc.,
Chair, Contractually, acquired by Coupa Software (COUP)

Ralph C. Derrickson
President and Chief Executive Officer,
BSQUARE Corporation

Robert J. Chamberlain
Chief Financial Officer, Zipwhip

Davin W. Cushman
Chief Executive Officer, Ignite Technologies

Mary Jesse
Senior Director, Alvarez and Marsal

Robert J. Peters
Principal, Palogic Value Management, L.P.

Ryan L. Vardeman
Principal, Palogic Value Management, L.P.

EXECUTIVE OFFICERS

Ralph C. Derrickson
President and Chief Executive Officer

Christopher Wheaton
Chief Financial Officer, Secretary and Treasurer

MAJOR GLOBAL OFFICE LOCATIONS

United States Headquarters:
1415 Western Avenue
Seattle, WA 98104
Tel: (425) 519-5900
Fax: (425) 519-5999
www.bsquare.com

United Kingdom
County Gate County Way
Trowbridge, Wiltshire BA14 7FJ United Kingdom
Tel: 44-1225-710600
Fax: 44-1225-710601

CORPORATE COUNSEL

DLA Piper LLP
Seattle, Washington

INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

Moss Adams LLP
Seattle, Washington

TRANSFER AGENT AND REGISTRAR

Broadridge Financial Solutions, Inc.
51 Mercedes Way, Edgewood, NY 11717
Shareholder Toll-Free: 1-877-830-4936
Shareholder Toll: 720-378-5591

ANNUAL MEETING

Our annual meeting of shareholders will be on Tuesday, June 11, 2020, at 10:00 a.m. local time at the offices of DLA Piper LLP (US), 701 Fifth Avenue, Suite 6900, Seattle, Washington 98104

FORM 10-K

We file an Annual Report on Form 10-K with the Securities and Exchange Commission. Copies are available without charge upon request. Requests should be sent to investorrelations@bsquare.com

STOCK EXCHANGE LISTING

Our common stock is traded on the Nasdaq Capital Market under the symbol BSQR.

DIVIDENDS

We have never paid cash dividends on our common stock. We currently intend to retain any future earnings to fund the development and growth of our business and, therefore, we do not anticipate paying any cash dividends in the foreseeable future

.

This annual report contains forward-looking statements based on current expectations, estimates and projections about our industry and our management's beliefs and assumptions. These forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that are difficult to predict. Please refer to the information set forth under the captions "Risk Factors" and "Forward-Looking Statements" in our Annual Report on Form 10-K and other reports or documents that we file from time to time with the Securities and Exchange Commission. Readers are cautioned not to place undue reliance on the forward- looking statements, which speak only as of the date made, and except as required by law, we undertake no obligation to update any forward-looking statement.